Synopsys Championship
Master Project List

Loc.	Proj. Num.	Team	Field	Gender	Students	Title
P99	061-210-82	T	PlantSci	F/M	Serena Lau & Hubert Lau	Effect of Plants and Mud on Generating Electricity in a Microbial Fuel Cell System.
P97	061-220-51		PlantSci	F	Sowmya Sundar	Phytoremediation of VOCs - Natural Indoor Air Purifier
P96	061-230-11		PlantSci	M	Liam Ellerby	Composting on Mars - Will It Work?
P95	061-240-E1		PlantSci	F	Yuqin Ma	Armies of Algae: Investigating the Effects of an Increase of Different Elements on the Growth of Nannochloropsis Oculata
P94	061-250-A1		PlantSci	M	Aayush Gaywala	Color of Grow Light
P93	061-260-61		PlantSci	M	Naman Maheshwari	The Plant's Soil
P92	061-270-21		PlantSci	M	Khai Gordon	Pollutants Effects on Plants
P91	061-280-F1		PlantSci	M	Spencer Chang	The effect of wind on different types of plants
P90	061-310-11		AnimalSci	F	Meera Kalluraya	Compare behaviors among guinea pigs and humans
P89	061-320-E1		AnimalSci	F	Ishana Wokhlu	Snail Be Gone
P88	061-410-A1		BiocheMic	F	Amritha Sohal	Transportation through Slime Molds
P85	061-420-61		BiocheMic	F	Zunaira Adil	Impending Crisis : Estimating the Risk of Antibiotic Resistance with Drug Overuse
P84	061-430-21		BiocheMic	F	Ishana Manikandan	Prevent Oxidative Stress, Keep Free Radicals Away: Determine the Antioxidant Levels of Produce Using Chemiluminescence
P83	061-440-F1		BiocheMic	M	Kailesh Jothikumar	Glowing Fungi
P82	061-460-71		BiocheMic	F	Nina Shailendra	Understanding Lactose Intolerance
P81	061-610-B1		MedHeaSci	M	Aryan Ganesh	Combination of Moringa and Sesamin to prevent and restrict early stages of cancer cell growth using Drosophila model
P80	061-630-31		MedHeaSci	F	Simone Vinay	Effect of cooking time on Vitamin C in vegetables
P79	062-A10-E1		Chemistry	M	Ibrahim Khan	Identifying Markers Used on Various Medium using Paper Chromatography
P78	062-A11-C1		Chemistry	M	Bharat Raj	Filtering Copper out of water
P77	062-A20-A1		Chemistry	M	Jayden Rodriguez	Rocks Into water
P76	062-A30-61		Chemistry	F	Irene Surprenant	Which Painkiller Dissolves Fastest in Stomach Acid?
P73	062-A40-21		Chemistry	M	Matthew Koo	The Best Material That Can Stand up to Chemicals
P72	062-A70-71		Chemistry	F	Maggie Liu	The Best Ink Sealant
P71	062-A80-31		Chemistry	M	Aman Chandra	Edible Explosives
P70	062-A90-G1		Chemistry	F	Harika Chodavarapu	The effect of different spray paint solutions on the drying time of each paint solution.
P69	062-B20-21		CheEnvEng	F	Amishi Gupta	Ferrofluids: Saving the Environment
P68	062-B30-F1		CheEnvEng	F	Isabella Perez	Does the Thickness of Insulation Used in your House Affect the Temperature Inside of It?
P67	062-B50-62	T	CheEnvEng	F	Maya Moorti & Kaya Lam	Can we create a natural coating to protect metal from acid rain?
N66	062-B60-31		CheEnvEng	F	Neyha Pradeepkumar	What is the effect of different voltage batteries in generating fuel cell energy?
N67	062-B70-G1		CheEnvEng	F	Zara Mody	The effect of different solutions on removing graffiti.
N68	062-C10-F1		EarEnvSci	M	Viraj Pandey	Impact of Aerogel-based super-insulators in providing the most effective, lowest density, highest durability [..more..]
N69	062-C20-B1		EarEnvSci	M	Yash Golwala	What is the effect of the type of bioplastic on its thermal conductive capabilities?
N70	062-C30-71		EarEnvSci	M	Anay Parikh	Going Green, Literally!
N72	062-C40-22	T	EarEnvSci	M	Arjun Sathish & Arush Pal & Vivek Yella	The Salinity Factor
N76	062-C50-F2	T	EarEnvSci	M	Sai Anish Karthik Sivakumar & Mrudubhaash Udatha	Green Power Relay
N78	062-C60-C1		EarEnvSci	M	Raahil SenGupta	The Effect of Different Purification Methods on Contaminated Water

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N79	062-C70-81		EarEnvSci	F	Sofia-Lynn Teresi	The effect of different insulators on a solar oven to determine which solar oven will reach the highest temperature.
N80	062-C80-41		EarEnvSci	M	Ryan Nguyen	Nanotechnology: The New Solution to Cleaning up Oil Spills?
N81	062-C90-H1		EarEnvSci	M	Roger He	Does the temperature of ocean water affect how much oil is extracted from water by using nanotechnology?
N82	062-D10-71		PhysAstr	M	Muhaab Syed	Effect Of Ceiling Height And Ventilation On Room Temperature
N83	062-D11-42	T	PhysAstr	M	Jason Nguyen & Kendrick Yen	Weight! How Fast Is It?
N85	062-D12-31		PhysAstr	F	Preeya Merchant	Building an Atwood Apparatus to measure co-efficient of static friction for different wheels
N88	062-D20-22	T	PhysAstr	F	Brenna Ren & Kallie Wang	Solar Powered Lanterns Based on Origami Techniques
N90	062-D21-11		PhysAstr	M	Andrew Su	Earthquake Proof Building
N91	062-D22-G1		PhysAstr	F	Rachel Yu	Voltage of Colors
N92	062-D30-G1		PhysAstr	F	Anjali Ruddaraju	Cup Phones
N93	062-D31-E1		PhysAstr	M	Zak Rahim	What is the effect of salt and temperature on the density of water?
N94	062-D40-C1		PhysAstr	M	Ari Schechtman	How does the temperature of water affect buoyancy?
N95	062-D41-A1		PhysAstr	F	Nainika Srinivasan	Fluid Mechanics: The Effect of Temperature and Type of Fluid on its Viscosity
N96	062-D51-61		PhysAstr	M	Tal Lerner	What effect does weather have on a crystal radio's output?
N97	062-D60-41		PhysAstr	M	Usman Khan	Harnessing the Energy of Water to Lift a Load
N98	062-D61-21		PhysAstr	M	Benjamin Schmidt	Faraday's Law of Induction, and its dependence on the Number of Coils and Material of the Wire
N99	062-D70-H1		PhysAstr	M	Albert Yao	Surface Tension on Fire
M99	062-D71-F1		PhysAstr	M	Cody Chen	The Effect Of Water Density on the Sound Frequency
M98	062-D80-D1		PhysAstr	M	Shauryan Kanaujia	Does the strength of an electromagnet vary by the number of turns in the magnet's coil?
M97	062-D81-B1		PhysAstr	F	Rishona Jain	The effect of temperature on the amount that a string instrument gets out of tune
M96	062-D90-91		PhysAstr	M	Jaiveer Gill	A Sound Proof of Soundproofing: Using a Novel Resonance Tube Apparatus to Measure Sound Absorption of Various Materials
M95	062-D91-71		PhysAstr	F	Emily Ren	The effect of temperature on viscosity of liquids
M94	062-E11-E1		ElecEng	M	Sreekar Maddipatla	Pedestrian Savior
M93	062-E30-81		ElecEng	M	Vignesh Rajagopalan	Solar Powered USB Charger for Mobile Phones
M92	062-E40-41		ElecEng	F	Serena Gandhi	The Polar Express: A Robot to Feed the Starving Polar Bears
M90	062-E50-G2	T	ElecEng	M	Ashrith Gandluru & Rishi Rakesh	Houston, do you Copy - An Experiment of Radio Communication
M88	062-E60-D1		ElecEng	M	Vishnu Duggirala	A photoresistor to detect an edible fruit and vegetable(Farm'Ohm'bot!).
M84	062-E70-82	T	ElecEng	F	Emma Lewis & Tania Troper & Lia Ruppin	Lap-top Charging fidget
M82	062-E80-51		ElecEng	M	Anish Raj	Modular recognition system for optimal skin moisture levels to avoid dehydration
M81	062-E90-H2	T	ElecEng	M	Nathan Fichtenholz & Milo Levin & Eliot Bronstein	The Flare: Putting out wildfires by release fire retardant
M79	062-F20-41		MechEng	M	Avi Gupta	Robo-Grabber
M78	062-F30-H1		MechEng	M	Ian Sim	Creating Cold Coolers!
M77	062-F40-D1		MechEng	F	Rachael Li	Turbine Generation
M76	062-F50-91		MechEng	M	Cary Yao	How Car Shape Affects Speed
M73	062-F60-42	T	MechEng	M	Aaron Peter & Om Suthar	MagLoop: The Method to Better Transportation

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M71	062-F70-11		MechEng	F	Rianne Sok	The effect of temperature on the speed of a breakfast Rube Goldberg machine.
M70	062-G10-G2	T	Math	M	Kyle Ciurczak & Arnav Shailesh	Angles in Soccer
M68	062-H10-91		SoftEng	M	Yash Sharma	Automatic Car Fuel Loader
M67	062-H20-51		SoftEng	F	Aisha AlQuraini	The Laundry Detector
L66	062-H30-H2	T	SoftEng	F/M	Carissa Wu & Justin Yang	Development of a Novel Traffic Simulator for Optimizing School Road Conditions
L68	062-H40-E1		SoftEng	F	Sanskriti Kamaraju	Smart Kitchen By Arduino
L69	071-210-B1		PlantSci	M	Aarav Garai	Agricultural Uses of Soap Nut
L70	071-211-91		PlantSci	F	Bella Teresi	Containing Invasive Species
L72	071-220-62	T	PlantSci	F	Maisie Rennie & Hannah Grayeski	What is the effect of restricting oxygen on the ripening of bananas
L76	071-230-22	T	PlantSci	F/M	Nishtha Verma & Sanjay patel & Sophia Ong	Will vitamins help speed up the process of seeds germination?
L78	071-240-G1		PlantSci	M	Praneel Shah	Investigating the Effect of Glucose Supplementation through Stem Injection on Sunflower Growth
L79	071-270-41		PlantSci	F	Katie Hamada	What Frequency of Watering is Best for Succulent Growth
L80	071-280-H1		PlantSci	F	Sarah Wilcox	Beat the Heat.
L81	071-410-C1		BiocheMic	M	Shiraz Mohammad	Effectiveness of Natural Remedies Compared to Triple Antibiotic on the Growth of E-coli
L82	071-420-81		BiocheMic	M	Samarjit Deshmukh	You Are What You Eat: The Health Implications of Legumes on the Gut Microbiome
L83	071-430-41		BiocheMic	F	Arshiya Sen	Natural vs Synthetic Antibiotics
L84	071-440-H1		BiocheMic	F	Katelyn Chao	Sanitation of Utensils Using Available Materials
L85	071-450-D1		BiocheMic	M	Shamit D'Souza	An Antioxidant Defense.
L88	071-460-91		BiocheMic	M	Brandon Do	Microbial Fuel Cell
L89	071-610-D1		MedHeaSci	F	Katarina Avlijas	Comparing smoothies for their potential impact on blood sugar levels.
L90	071-720-H2	T	BiomedEng	F	Danna Rengifo & Aryanna Morte & Clarissa Co	Creating a Closed Loop Artificial Pancreas to Treat Type 1 Diabetes
L92	071-730-E1		BiomedEng	F	Roshni Mohapatra	Restoring the Popularity of High School Football
L93	071-740-92	T	BiomedEng	F	Zaaina Syeda & Maryam Ismail & Saamya Yadav	Developing a Low-Cost Voice-Controlled Prosthetic Hand to Aid Amputees
L95	072-A10-G1		Chemistry	F	Audrey Cai	What is the Effect of Carbon Dioxide on the Temperature of Water?
L96	072-A20-C1		Chemistry	F	Megan Wang	Dyed Hair Die
L97	072-A30-72	T	Chemistry	M	Jay Gokani & Rushil Bandikalla	Bio-plastics: The Real Deal
L99	072-A40-41		Chemistry	M	Sangeet Satpathy	What is the effect of temperature on the flocculation process of water treatment?
K99	072-A50-H1		Chemistry	M	Ryan Field	What food has the most electrical conductivity?
K98	072-A60-D1		Chemistry	F	Shreya Ghoshal	The Effect of Dissolved Substances on the Evaporation Rate of Water
K97	072-A70-91		Chemistry	M	Greyson Fang	How the Type of Liquid that Metal is Exposed to Affects the Amount of Oxide Formed
K95	072-B10-72	T	CheEnvEng	F	Rebeca Urdaneta & Elisa Grothe	Eliminating Sargasso Seaweed from the Surface of the Ocean
K93	072-B11-52	T	CheEnvEng	F	Aaina Bhatia & Jesssica Kendrick & Ruby Goodwin	A Cost Efficient and Portable Water Filter
K91	072-B21-12	T	CheEnvEng	F/M	Aadit Kannan & Dahyun Kim & Tam Hoang	Rubbish Reminder
K89	072-B30-G2	T	CheEnvEng	M	Aarnav Nagabhirava & Om Kulkarni & Sidak Sandhu	Building an Eco-Friendly and Cost Efficient Reverse Osmosis Filter to Supply Fresh Water to 3rd World Countries
K84	072-B31-E2	T	CheEnvEng	M	Justin Vo & Noah Flynn & Joon Han	Saving Planet Earth From Home Water Pollution
K82	072-B41-B1		CheEnvEng	F	Calista Hua	Keep Calm and Compost On
K81	072-B50-82	T	CheEnvEng	F	Agatha Vu & Mitee Su & Lucy Johnson	Stand Up to Earthquakes
K79	072-B51-71		CheEnvEng	F	Madison Lin	A New Storm Drain Filter: Aiding the Fight Against Pollution

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K78	072-B60-42	T	CheEnvEng	M	Vedanth Vijay & Karan Kolappa & Ethan Ha	Making Storm Drains More Efficient
K76	072-B61-31		CheEnvEng	F	Manahil Zeeshan	Could Artificial Islands Substitute Sinking Land?
K72	072-B70-H2	T	CheEnvEng	F/M	Samuel Geevarghese & Saarika Gunapu & Aakash Vetcha	Smart Watering Device: Reduce water consumption in agriculture using technology
K70	072-B71-G1		CheEnvEng	M	Shawnuk Ballal	Designing a hand warmer using oxidation of easily available materials
K69	072-B80-D2	T	CheEnvEng	M	Soham Kulkarni & Dylan Ng & Aryan Ponnuru	The Crop Box
K67	072-B81-B2	T	CheEnvEng	M	Yashas Khattar & Anwen Hao	Water Purification System
J66	072-B90-92	T	CheEnvEng	F	Laura Lizarazo Navarro & Ridhima Gupta & Arya Yadav	Effective Irrigation Systems for California Almond Farms.
J68	072-B91-81		CheEnvEng	M	Albert Yu	A Solar Powered Desalination Apparatus
J69	072-C10-H1		EarEnvSci	M	Rishab Perati	Evaluating The Ability and Mechanism of How Mealworms Break Down Plastic Waste from Different Sources
J70	072-C11-F1		EarEnvSci	F	Aashna Prasad	Testing the efficacy of different types of control line strategies on wildfires.
J71	072-C20-D1		EarEnvSci	M	Yusuf Kholaif	To Doom the Algal Bloom: Testing the effect of oxygen and pH levels on eutrophication of algae
J72	072-C30-91		EarEnvSci	F	Nicole Kheyfets	Tsunami Power
J73	072-C50-11		EarEnvSci	M	Aidan Miranda	Leveraging Sea Shells to Reduce Ocean Acidification
J76	072-C60-E1		EarEnvSci	F	Reva Sharma	"Solid Air": World's Lightest Materials
J77	072-C70-A1		EarEnvSci	F	Maahi Vidyarthi	S.O.S - Save Our Seas
J78	072-C80-61		EarEnvSci	F	Snigdha Pallikonda	What is the effect of soil type on the amplitude of a longitudinal wave?
J79	072-C90-21		EarEnvSci	F	Catherine Dover	Measuring CO2 absorption in sea water
J80	072-D10-91		PhysAstr	F	Ada Yoder	Smartphone RF Radiation: Measured Directionally and at Varying Distances
J81	072-D20-51		PhysAstr	M	Nolan Chen	Magnetic Strength Variation
J82	072-D40-E1		PhysAstr	F	Samanya Girish	Exoplanet Discovery: Advancing the Study of Cosmology Using Photometry
J83	072-D50-A1		PhysAstr	F	Maya Schechtman	Light Refraction and the Density of Water
J84	072-D60-61		PhysAstr	M	Gavin Mace	Testing 3D printed truss bridges
J85	072-E10-11		ElecEng	M	Kyle Morley	Turbine-Powered Shark Tag
J88	072-E11-G1		ElecEng	M	Victor Gong	Distracted Driving Detection: A real-time system to detect distracted driving
J89	072-E20-E1		ElecEng	M	Mukilan Rajasekar	Electricity-Generating Speed Bump
J90	072-E21-C1		ElecEng	M	Rishi Prasad	Personal Medical Assistant
J91	072-E30-92	T	ElecEng	M	Ananth Kini & Hiranya Parekh & Jonathan Thomas	The Heat Detector App
J93	072-E31-81		ElecEng	M	Pranav Sukesh	Energy Efficient Heating and Cooling Using an IR Thermal Sensor
J94	072-E40-52	T	ElecEng	F	Ashika Sugali & Reiko Yoshimura & Martyna Sobczyk	Building a Microbial Fuel Cell to Limit Fossil Fuel Waste and Pollution
J96	072-E41-41		ElecEng	M	Vir Bhutani	Design and Development of a Smart Lock Prototype for Fire Emergencies
J97	072-E50-21		ElecEng	M	Aahan Shah	Odor Localization and Transduction of Signals Using Olfactory Sensory Device
J98	072-E51-H1		ElecEng	M	Andrew Huang	Electromagnetic Train
J99	072-E61-D1		ElecEng	F	Kasey Kepler	LED Solar Jacket
H99	072-E70-B1		ElecEng	F	Saanvi Bapat	What is the effect of the different color of paper that is used to reflect light on the resistance of a photoresistor?
H98	072-E80-71		ElecEng	M	Micah Nassi	Sound Adventures: A Gaming Experience Made For People With Limited Vision
H97	072-E90-22	T	ElecEng	M	Elie Bodner & Zalman Zucker	REP: A Solution to Electricity Caused Fires and Blackouts
H95	072-F10-A1		MechEng	M	Arnav Bhardwaj	Water System that detects moisture content in soil to automatically water plants.
H94	072-F11-81		MechEng	M	James Tsaggaris	Designing A Page-Flipping Device

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H93	072-F20-52	T	MechEng	M	Connor Houle & Gabriel Futsum & Micahj Keegan	Game -Changing shoe
H91	072-F21-41		MechEng	F	Riya Kondepudy	Designing a wheelchair that can go over stairs and all terrains with a stable seat.
H90	072-F30-21		MechEng	M	Diyan Shah	Automatic Seed Planter
H89	072-F31-H1		MechEng	M	Hrishikesh Ankireddi	Need a Hand? - A Low Cost Approach to Modern Prosthetics with Custom-Designed Legos and Arduino
H88	072-F40-F1		MechEng	F	Anishka Vissamsetty	Hydraulic Cranes
H85	072-F50-A2	T	MechEng	M	Harsha Manamala & Arin Kathapurkar	Sign Language Glove
H83	072-F60-62	T	MechEng	M	Neel Jagdish & Marcus Yee	Design for Modular Self-Adjusting Rooftop Solar Panels
H81	072-F70-31		MechEng	F	Saarika Apte	Oil Away!
H80	072-F80-G1		MechEng	M	Elijah Cedar	Blurred Lines: How VR/XR is becoming less "virtual"
H79	072-F90-B2	T	MechEng	M	Isaac Zucker & Ori Gillai	Smart Positive Air Pressure Chemical Weapons Shelter
H77	072-G10-21		Math	F	Maryam Ladkani	What is the effect of ball shooting angles on turf, grass, sand, & dirt fields at the time of scoring goals?
H76	072-G20-F1		Math	M	Gabe Sachse	Which stat correlates best to run scoring in Major League Baseball?
H73	072-H10-B1		SoftEng	F	Sahngwie Yim	Triple Neural Network Redundancy(TNN)
H72	072-H11-91		SoftEng	M	Julian Hong	Predicting Successfulness Of Tweets Using A.I.
H71	072-H20-71		SoftEng	M	Aaryan Doshi	SafetyBot: Sensor-based application to Detect Prolonged Stove Usage and Prevent Home Fires
H70	072-H21-51		SoftEng	M	Agastya Goel	Deep Reinforcement Learning for the Games of 3's and 2048
H69	072-H30-31		SoftEng	F	Pakhi Gupta	Luggage on Invisible Leash
H68	072-H31-11		SoftEng	M	Nitin Vadulas	Children And Pet LifeSaver
H67	072-H40-G1		SoftEng	F	Iris Cai	ScratchCat Spanish: Connecting the World Through Language
H66	072-H41-E1		SoftEng	F	Saanvi Bhargava	Digital Security and Password Hygiene
G66	072-H50-C1		SoftEng	M	Nishant Perla	Yelp for Help!: A Disaster Relief App
G67	072-H51-A1		SoftEng	M	Ayush Ghosh	Home Navigation Assistant for the Visually Impaired
G68	072-H60-72	T	SoftEng	M	Arham Siddiqui & Daniel Ticau & Daniel Jeznach	Creating an AI Sight System to Aid the Visually Impaired
G70	072-H61-61		SoftEng	M	Krish Maheshwari	A Chrome Extension to Reduce Distractions.
G71	072-H70-41		SoftEng	F	Nimrit Dhanjal	Short Sorts
G72	072-H71-21		SoftEng	M	Ishan Juluri	Using Pathfinding Algorithms to Evacuate a Burning Building
G73	072-H80-H1		SoftEng	F	Anika Pallapothu	Predict using AI: Diagnosing of Diabetic Eye Diseases using Computer Vision, CNN, and Deep Learning
G76	072-H81-E2	T	SoftEng	F	Zoe Stern & Avishai Yisrael	Cancerscope
G78	072-H90-D1		SoftEng	M	Anish Bhethanabotla	AI Eye - Navigation Aid for the Visually Impaired
G79	081-210-D1		PlantSci	F	Salma Farahat	What Effect Does Ionizing Radiation Have on Plant Growth?
G80	081-220-82	T	PlantSci	F	Maryam Zehra & Katherine Fields	Purified water vs filtered water vs natural water and its effect on plants
G82	081-230-42	T	PlantSci	M	Benjamin Cha & Brandon Zau	The Effects of Pondweed on Plant Growth
G84	081-240-11		PlantSci	M	Bowie Chiu	The Growth of Moss Under Different Growing Conditions
G85	081-260-A1		PlantSci	F	Ashley Sailor	Survival of the Fittest: Flooding Edition
G88	081-270-52	T	PlantSci	F	Sofia Barreras & Jasreen Toor	Organic Bananas' Effect on Conventional Fruit
G90	081-310-51		AnimalSci	F	Iffat Alamgir	The Effects of Magnetic Fields on Fetal Development: Using Planaria as a Model
G91	081-320-11		AnimalSci	M	Sadik Aref	Effect of nootropic supplements on the regeneration of planaria

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G92	081-330-D2	T	AnimalSci	F	Cynthia Wang & Chloe Lee	Effect of Magnets on Different Freshwater Fish and Their Ability to Find Prey
G94	081-340-92	T	AnimalSci	F	Catherine Wong & Margaret Cartee	What is the effect of valerian root on the nighttime activity of Drosophila Melanogaster?
G96	081-350-52	T	AnimalSci	M	David Jang & Daniel Lin	Predicting and Dectecting the Location of Ant Pheromone And Eradicating Ant Colony Through Chemical Aerosol Spray
G98	081-360-21		AnimalSci	F	Sasha Wang	Can Pillbugs Learn?
G99	081-370-F1		AnimalSci	F	Tanvi Chukka	Classifying Birds in an efficient way using machine learning through an app
F99	081-410-E1		BiocheMic	F	Ananya Sriram	The Correlation Between the Overpopulation of Algae and the Oceans Iron Depletion
F98	081-411-C1		BiocheMic	M	Austin Hu	Does Sugar Affect Bacterial Growth in Your Mouth?
F97	081-420-A1		BiocheMic	M	Ameen Elshareif	Which Enzymes are Best to Use When Converting Cellulosic Material into Bio-Fuel?
F96	081-430-61		BiocheMic	F	Sudithi Manthati	The Effect of Different Solvent Extract of Turmeric on Their Antibacterial Properties
F95	081-431-32	T	BiocheMic	F/M	Nina Llamas & Allison Nguyen & Matthew Van	Container No Brainer; Which method of food packaging preserves it the best?
F93	081-440-12	T	BiocheMic	F	Aeliya Grover & Medini Halepete	The Effect of Microplastics on the Growth of Bacteria Culture
F91	081-441-H1		BiocheMic	F	Diya Kadadi	Investigating an Aquatic Quandary: A Novel Solution to Microplastic Pollution in Oceans and Freshwater Bodies
F90	081-470-71		BiocheMic	M	Brandon Tsai	Camp Filter
F89	081-490-F2	T	BiocheMic	M	Arjun Gurjar & Arjun Krishna	Increasing the Efficiency of the Bacterial-Degradation of The s-Triazine Herbicide Atrazine
F85	081-620-A2	T	MedHeaSci	F	Anika Mantripragada & Anika Maji	Effects of Everyday Electromagnetic Frequencies on Gut Bacteria
F83	081-630-62	T	MedHeaSci	F	Divya Venkat & Serena Janny	The Effect of Pen Design on Hand Strain
F81	081-640-22	T	MedHeaSci	F	Ella Lan & Heidi Lu	Developing a Method to Detect Circadian State From Gene Expression Through Machine Learning
F79	081-650-F2	T	MedHeaSci	F	Alena Suleiman & Katelyn Zhao	The Impact Absorption of Various Shoe Insoles for Athletes
F77	081-710-62	T	BiomedEng	F	Medha Yarlagadda & Selina Xu	Which agro-waste substrate most affectively improves the strength of mycelium bricks?
F73	081-720-31		BiomedEng	M	Ishwar Suriyaprakash	Effect of Finger-Related Tasks on the Performance of Finger Muscles
F72	081-730-F2	T	BiomedEng	F	Diya Desai & Sarah Honer & Rosie Chen	Concussion Headbands: Measuring Different Concussion Headbands' Ability to Reduce Brain Movement
F70	081-750-72	T	BiomedEng	F	Vyshnavi Katta & Fatimah Ismail & Anna Beronilla	Designing Micro-robots to Detect and Deliver Medication to Diseased Cells in Cancer Patients
F68	081-760-32	T	BiomedEng	M	Arnav Swaroop & Thomas Liu	A Novel, Least Invasive Way to Detect and Destroy Thrombosis
F66	081-780-D1		BiomedEng	M	Ravi Prabhune	Nerve Growth Tracking with Non-Invasive Sensing
E66	081-790-91		BiomedEng	F	Kavya Ummethala	Fall detection for the elderly.
E67	082-A10-H2	T	Chemistry	M	Tevin Ding & Daniel Kim	Explore temperature effects on refractive index of highly soluble materials
E69	082-A30-A1		Chemistry	F	Sreya Sreenivasan	Agar Percentage On Electrophoresis Separation of Food Dye
E70	082-A40-61		Chemistry	F	Josephine Kwok	Which Food Wrap Will Delay Food Decay the Longest?
E71	082-A50-21		Chemistry	F	Aziza Mohammed	Non-Invasive detection of glucose in aqueous solutions and beyond
E72	082-B10-92	T	CheEnvEng	M	Jordan Labio & Zachary Blue	Passively Rotating Wind Turbine
E76	082-B11-72	T	CheEnvEng	F	Emi Fujimura & Callie Yuan	What is the effect of different, soft and kid-friendly materials on the insulation of hot and cold water?
E78	082-B20-52	T	CheEnvEng	M	Veyd Patil & Arjun Moogimane	The H2O Saver

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
E80	082-B30-12	T	CheEnvEng	M	Kyle Leung & Vardaan Ghai	Sterilizing Towels and Sponges Using Solar Powered UV Light
E82	082-B31-H1		CheEnvEng	M	Rohit Vakkalagadda	Using Natural Bio-waste Fibers to Strengthen Clay Bricks
E83	082-B40-F1		CheEnvEng	F	Elisha Rahardja	Forest Fire Warning System
E84	082-B41-D1		CheEnvEng	M	Mohammad Rana	Charged Up
E88	082-B50-A2	T	CheEnvEng	F	Taylor Wong & Stephanie Vu	Petroleum Overflow Apparatus
E90	082-B51-91		CheEnvEng	F	Himani Manjunath	Bioplastic from Root Vegetables and Its Effect on Tensile Strength, Water Permeability, and Biodegradability
E91	082-B60-62	T	CheEnvEng	F	Sanjana Yeluri & Pranathi Ravipati & Anushka Rala	Creating a Water Conservative Indoor System to Use While Gardening
E93	082-B61-51		CheEnvEng	F	Nandana Shankar	Waterwise
E94	082-B70-22	T	CheEnvEng	F	Miranda Gutierrez & Aasees Sandhu & Nadine Paula Ngo	Optical Character Reader for Waste Distribution in Hospitals
E96	082-B71-11		CheEnvEng	M	Keshav Narang	A Novel Approach to Detect Plastic and Harmful Man-Made Waste
E97	082-B80-G1		CheEnvEng	F	Dashmi Singh	Biodegradable Six-Pack Rings
E98	082-B81-E1		CheEnvEng	F	Noa Reyzblat	Self Sufficient Floating City
E99	082-B90-C1		CheEnvEng	F	Medha Mahanta	Effect of Plasticizer on the Bioplastic's Strength
D99	082-C10-21		EarEnvSci	M	Henry Yao	Designing an Eco-Friendly and Cost Effective Way to Remove Chromium from Waste Water
D98	082-C11-H1		EarEnvSci	F	Sonia Swamy	BioBooster - Sustainable, cost-effective, non-disruptive biopolymers for improving soil stability and plant Growth.
D97	082-C20-F1		EarEnvSci	M	Aadit Golwala	What is the effect of the amount of plasticizer on the weight-bearing capacity of a bioplastic?
D96	082-C21-C2	T	EarEnvSci	F	Caitlin Nguyen & Marisa Malto	Improving Phycoremediation: Effect of Chlorella Vulgaris's Exposure to Different Calcium Compounds on its Copper Intake
D94	082-C22-A2	T	EarEnvSci	F	Emily Kwan & Kaitlyn Wang	The Effects of Enterobacter on Soil Pollution
D92	082-C30-B1		EarEnvSci	F	Safia Peer	A trashcan that can break down plastic
D91	082-C40-71		EarEnvSci	F	Khadeejah Khan	Are Heavy Metals Safe for Aquatic Life?
D90	082-C41-51		EarEnvSci	M	Jack Reilly	Solar Water Desalination
D89	082-C50-22	T	EarEnvSci	F	Eira Saraff & Masha Velikhovskaya	The effect chemicals in sunscreen on Egeria densa Brazilian elodea
D85	082-C51-11		EarEnvSci	M	Vishwa Prakash	Solar Water Desalination
D84	082-C60-G1		EarEnvSci	F	Hoshita Undella	What is the effect of different desalination methods on the salinity of water?
D83	082-C70-B2	T	EarEnvSci	F	Shareen Chahal & Ishani Sood	Eco-Friendly Detergents: Do They Really Make a Difference?
D81	082-C71-A1		EarEnvSci	M	Vedant Janapaty	Curtailing extent of fire damage using a machine learning model based on land conditions
D80	082-C80-72	T	EarEnvSci	F	Shanaya Dhawan & Kinnera Mulam	Sharpie Ink Effects on Plants
D78	082-C81-61		EarEnvSci	F	Elaine Lee	Effectiveness of Tea on Dispersing Oil
D77	082-C90-41		EarEnvSci	M	Eshan Rachapudi	Rainwater Harvesting on Hillsides
D76	082-C91-21		EarEnvSci	M	Andrew Chandra	The effect of weather (clouds, temperature) on the effectiveness of solar cells.
D73	082-D10-A2	T	PhysAstr	M	Edward Huang & Andrew Au	What is the Effect of Sound Wave Frequency on the Amount of Energy harvested?
D71	082-D11-91		PhysAstr	M	Justin Kim	The effect of the shape of a space capsule on the lift produced.
D69	082-D20-62	T	PhysAstr	M	Panav Gogte & Chirant Shekar	The Impact of Temperature on the Flight of a Tennis Ball.
D67	082-D30-22	T	PhysAstr	M	Ryan Co & Jonathan Garnica & Noah Barlahan	How does mass placement affect the rotation of an airborne object whilst the intermediate axis theorem is in play?

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
C66	082-D40-G1		PhysAstr	M	Pranav Bellannagari	Calibration of a Force Sensor for Bionic Applications
C67	082-D50-C1		PhysAstr	M	Abhay Dharnidharka	Effect of Succulents on Radiation Detected
C68	082-D60-81		PhysAstr	M	Cameron Nguyen	Investigating Radiometer Motion
C69	082-D70-41		PhysAstr	M	Justin Huang	Using A Grating Spectrometer to Study the Effectiveness of Blue Light Blocking Glasses
C70	082-D80-G2	T	PhysAstr	M	Terry Hsu & William Tang	Up, Up, and Away: A Quantitative Analysis On The Most Efficient Airfoil Type
C72	082-D90-D1		PhysAstr	F	Micaela Swift	The Effect of Weight on Vehicle Traction
C73	082-E10-31		ElecEng	M	Bhargava Kanakapura	A Prototype Device to Save Infants from Being Left in a Car Alone
C76	082-E11-H2	T	ElecEng	F	Karen Glenn & Annabel Honigstein	Helmet : On
C78	082-E20-G1		ElecEng	M	Aryah Oztanir	Designing a safer, more efficient, and inexpensive traffic light
C79	082-E21-E1		ElecEng	F	Rishika Mallu	Safety Vehicle Detector Cone
C80	082-E30-C1		ElecEng	M	Shakil Musthafa	Converting sound and air pressure into electrical energy
C81	082-E31-A1		ElecEng	M	Carter Thornton	Household Energy Hogs and Ways to Mitigate Them with Power Strips and Energy Monitors
C82	082-E40-72	T	ElecEng	M	Jeremy Flint & Aidan Liu	Converting a Three-Phase Motor Into An Electric Generator Using Faraday's Law of Electromagnetic Induction
C84	082-E50-41		ElecEng	M	Edward Lu	Phone Cooler and Warmer
C85	082-E60-H1		ElecEng	F	Rishita Shah	A Smart White Cane Utilized for Visually Impaired Individuals
C88	082-E70-D1		ElecEng	F	Sudeepthi Ravipati	A Solar Microgrid
C89	082-E80-91		ElecEng	M	Adhip Raghunathan	Utilizing the Seebeck Effect to Harvest Thermal Energy from Solar Panel
C90	082-E90-42	T	ElecEng	F	Michelle Wei & Ella Yee	Multi-planar Solar Panel Design for More Efficient and Accessible Green Energy
C92	082-F10-B2	T	MechEng	M	Jonathan Yu & Rithvik Chavali	Powering the Future With Paper Origami
C94	082-F11-A1		MechEng	F	Grace Calfee	Wind on the Wing: Making a Wind Tunnel That Helps Students Easily Learn About Aeronautics and Airflow
C95	082-F12-81		MechEng	M	Advik Gonugunta	Pot-N-Filter
C96	082-F21-61		MechEng	F	Vedavi Kavoori	How to Push, or Blow, Tesla the Extra Mile
C97	082-F22-41		MechEng	F	Ria Prashant	The Future of Portable Washing Machines
C98	082-F30-32	T	MechEng	M	Ashwin Kuppahally & Om Tandon	Harnessing Energy with the Power of Regenerative Driving
B99	082-F31-21		MechEng	M	Jason Fischer	Preventing Stall in Model Gliders
B98	082-F40-G2	T	MechEng	M	Melvin Mathew & Keith Maben	Inexpensive Water Catchment/Purification and Electricity Generation Device
B96	082-F41-F1		MechEng	M	Sanjit Borle	Automated Sun-Visor with Photon Detection Part 2
B94	082-F50-C2	T	MechEng	F	Ruhi Batchu & Anika Dontu & Udita Mahajan	Designing an Efficient Mechanism to Avert Detrimental Falls from Balconies using an Automated Detection System
B92	082-F51-B1		MechEng	F	Rassa Khosravi	The Hands-Free Page Turner
B90	082-F60-82	T	MechEng	M	Ryan Raphael & Selim Gurkas & John Lee	Creating a System/Mechanism that Recycles Grey Water for different purposes using a filtering and piping system
B88	082-F61-71		MechEng	M	Nicolas Quijano	Self-Stabilizing Spoon for Hand Tremors
B85	082-F70-42	T	MechEng	F	Romina Blanco-Sarmiento & Javeria Ahmed & Ynna Buriel	Partial Autonomous Temperature Combustion Hexagonal Extinguisher
B83	082-F71-31		MechEng	M	Atharvaa Jogalekar	Duct, Duct, Goose: Measuring the strength of various types of adhesive tape.
B81	082-F80-H2	T	MechEng	F/M	Chaela Zaide & Nikhil Ramkrishnan & Yul Han	Engineered Storm Drain Filtration System
B79	082-F81-F2	T	MechEng	M	Jonathan Zhang & Beren Gao	Using Origami Techniques to Design Weight-Bearing and Bio-friendly Parachutes

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
B77	082-F90-D2	T	MechEng	M	Bien Antonio Dela Cruz & Devin Wong & Jacob Horne	Triggerlocketry: Using Geofences and Linear Actuators to Help Prevent Gun Violence
B73	082-F91-B2	T	MechEng	M	Alon Knaan & Noam Radwin	Milkweed SeedBall Launcher
B71	082-H10-D1		SoftEng	F	Tanisha Gupta	A War on Invasives: A Machine Learning Software To Detect Invasive Plants
B70	082-H11-A2	T	SoftEng	F	Alice Tao & Olivia Xu	Using Machine Learning to Classify Plastic
B68	082-H12-91		SoftEng	M	Arnav Saharan	Automatic Solar Bike Indicator
B67	082-H20-91		SoftEng	F	Sana Khan	Creating a Video Game for the Visually Impaired
A66	082-H21-62	T	SoftEng	F	Priyanka Karunakaran & Sudiksha Das	Using Artificial Intelligence and Machine Learning to Detect Distracted Drivers
A68	082-H22-42	T	SoftEng	M	Navon Soussan & Ben Freda-Eskenazi	To Understand or Not to Understand.
A70	082-H30-42	T	SoftEng	M	Ramit Goyal & Gautam Bhooma	ForesAIght: Machine Learning powered Assistant for the Visually Impaired
A72	082-H31-31		SoftEng	F	Sama Karim	Weed It Out!
A73	082-H32-11		SoftEng	F	Reshma Kosaraju	Application of X-Ray Imaging to Prevent Misdiagnosis of Thoracic Diseases Using Machine Learning and Neural Networks
A76	082-H40-11		SoftEng	F	Nithya Appannagaari	The Game of Life
A77	082-H41-G1		SoftEng	M	Yashnil Saha	A novel web-based application to model, analyze, visualize, and predict global surface temperature anomalies
A78	082-H42-E1		SoftEng	M	Neel Sudhakaran	Developing a Model to Determine Potential Potable Water Sources
A79	082-H50-D2	T	SoftEng	M	Vivek Nayyar & Adrian Liu	The Perfect Volleyball Serve
A81	082-H51-C1		SoftEng	F	Audrey Paleczny	Machine Learning Recognition
A82	082-H52-A1		SoftEng	F	Samantha Pelts	Mom, I'm Home!
A84	082-H60-92	T	SoftEng	M	Alex Guo & Nathan Liu	Using AI to Distinguish Between Human Caused and Natural Fires
A88	082-H61-72	T	SoftEng	M	Rishi Sinha & Sathvik Nookala	Software Defined Frequency Modulation Radio Transmitter
A90	082-H70-52	T	SoftEng	F	Emma Gao & Lera Vaisburd	Using Machine Learning to Classify Solid Waste
A92	082-H71-41		SoftEng	F	Sangyani Sinha	CytoCounter: Using Machine Learning to Count ELISpots
A93	082-H80-21		SoftEng	F	Anagha Badriprasad	Creating a Machine Learning Algorithm to Accurately Identify Locations of Tumors from Brain MRI Scans
A94	082-H81-H1		SoftEng	M	Yash Chitambar	Skin Cancer Photo Recognition Software
A95	082-H90-F1		SoftEng	F	Paulina Xu	Multimodal Transportation
A96	082-H91-D1		SoftEng	F	Sanskriti Singh	A Convolutional Neural Network compensating for Human Fallibility when Detecting Pneumonia through Attention
N10	091-210-E2	T	PlantSci	F/M	Sabrina Zhu & Nicholas Wei	Early Detection of Drought Stress and Optimizing Plant Watering by Classifying Spinach Leaf Images with Machine Learning
N12	091-220-A2	T	PlantSci	F/M	Brian Ling & Jamie Tan & Avni Mangla	Effect of Urban City Lights on Circadian Rhythm and growth of common aquatic plant Elodea Canadensis
N14	091-230-62	T	PlantSci	M	Aditya Rao & Arihan Yadav	The Effect Of Magnetism On The Growth of Pea Plants
N16	091-240-31		PlantSci	F	Taara Jayaraj	The Effect of Aloe Vera Gel on the Growth Rate of Mold on Strawberries
N17	091-260-C1		PlantSci	F	Isabel Vargas-Hurlston	The Short-Term Effects of Carbon Dioxide on the Cellular Respiration of Ipomoea Batatas
N18	091-270-81		PlantSci	M	Aayush Vemuri	Can Farmers in Developing Countries use Natural Pesticides as an Alternative to Chemical Pesticides?
N20	091-280-32	T	PlantSci	F	Katherine Tat & Tram Ng & nhi tran	Redefining Martian Soil
N22	091-310-62	T	AnimalSci	F	Charlene Guo & Kylie Chang & Joelle Jung	Detecting Microplastic Pollutants in Water with Daphnia Magna

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
N26	091-320-31		AnimalSci	F	Trisha Sreedhar	The effect of increasing haemocyte density in Galleria Mellonella larvae after inoculation of bacillus thuringiensis
N27	091-330-G1		AnimalSci	F	Angela Zhang	Finding the herd immunity threshold for the BT toxin (Cry toxin) in the greater wax moth Galleria mellonella
N28	091-340-C1		AnimalSci	F	Kelly Tung	Investigating the Functions of xpa-1 and him-1 Genes in UV Resistance of Caenorhabditis elegans by Combinatorial RNAi
N29	091-350-81		AnimalSci	F	Katelyn Yeh	Effects of Chronic Exposure to Paraxanthine in C. Elegans
N30	091-360-41		AnimalSci	F	Christine Xu	How does isolation affect a Drosophila's ability to learn mazes
N31	091-380-D1		AnimalSci	F	Iryna Iziumska	Effect of Aiptasia Pallida's Symbiosis on Response to Copper Stressors
N32	091-390-82	T	AnimalSci	F	Raina Liem & Callie Johnson	Styrofoam- the New Meal for Mealworms
N34	091-410-G1		BiocheMic	M	Varun Kumaravelu	Effect of biological activity of Neisseria Sicca on cigarette filters in a marine environment.
N35	091-420-C1		BiocheMic	F	Avani Kulshreshtha	What is the effect of nutrient enhancement on biohydrogen gas production of the green algae Chlamydomonas reinhardtii?
N36	091-440-32	T	BiocheMic	F	Emma Biswas & Arissa Huda	The Effect of the Temperature Increase Over 300 Years on the Growth of Staphylococcus aureus, Using Micrococcus luteus
N38	091-460-D1		BiocheMic	F	Sanjana Manikandan	Fighting Ocean Acidification with Underwater Forests"A Study of the development of Sea Urchin Larvae in Seagrass forests
N39	091-470-91		BiocheMic	F	Nikita Senthil	The Effect of Nanosilver on Human Gastrointestinal Microbiota and Daphnia magna as a Bioassay for Freshwater Ecosystems
N42	091-480-51		BiocheMic	M	Markos Bealu	The Role of Heat Treatment on Microbial Effects for Teff-Based Foods
N43	091-510-72	T	BioInfo	M	Gordon Chen & Athreya Daniel	A Novel Approach to Discovering New Drugs in the Treatment of Mesothelioma
N45	091-520-41		BioInfo	F	Sarieli Sribhashyam	What is the effect of ADHD on brain fold morphology in MRI scans compared to morphologies in non-affected patients?
N46	091-530-H1		BioInfo	F	Ashwika Agrawal	Automated Diagnosis of Infections in Piercings using Deep Learning and Convolutional Neural Networks
N47	091-540-D1		BioInfo	F	Snikitha Banda	Analyzing Online Patient-EKG Data Sets: A Novel Approach for the Detection of Early Heart Disease
N48	091-550-91		BioInfo	M	Saurish Srivastava	Predicting Chemical Responses on Type 1 and 2 Neurofibromatosis Patients Leveraging Machine Learning
N49	091-560-51		BioInfo	M	Rishi Gupta	Detecting Asthmatic Crackles using Machine Learning
N50	091-710-91		BiomedEng	M	Anirudh Venkatraman	A Novel Device to Detect Infection of Wounds
N51	092-A10-31		Chemistry	F	Sravya Varada	Dissolving calcium and magnesium precipitates with an acid base reagent
N52	092-A20-G1		Chemistry	M	Rayyan Talukdar	Shedding Light on Evidence: A Forensic Application of UV-Vis Spectroscopy
N53	092-A40-81		Chemistry	F	Sarai Castaneda	Does the Age of Pipes Affect the Quality of Water?
N54	092-B10-B2	T	CheEnvEng	F	Kavya Pandrangi & Akshara Taraniganty	Devising a filtration system for kitchen exhaust vents to reduce the effect of harmful pollutants outdoors
N56	092-B11-A1		CheEnvEng	F	Namrata Nair	Designing a Visual Fire-Predicting Model for U.S. Counties Using Weather Datasets
N57	092-B21-61		CheEnvEng	F	Joyce Yang	Tensile Strength and Hydrophobic Effect of Starch-Based Biodegradable Polymers
N58	092-B30-41		CheEnvEng	F	Sharon Zhu	Designing and Modeling a Parhelia Using Economical Materials
N59	092-B31-21		CheEnvEng	M	Kinjal Govil	Can energy efficient solar desalination solve the water crisis?

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
M59	092-B40-G2	T	CheEnvEng	M	Andrew Peng & Aaron Yan	Sustainable water filtration for rural communities
M57	092-B50-C2	T	CheEnvEng	F	Catherine Zhou & Sophia Khubchandani	Creating a Novel, Non-toxic, and Efficient Ice Pack using INA Ice Nucleation Proteins from Pseudomonas Syringae
M55	092-B70-42	T	CheEnvEng	F	Aminah Hedges & Alexis Tan	Using Native Flora to Fabricate Sustainable Erosion Control
M53	092-B80-H2	T	CheEnvEng	F	Danica Kubota & Jia Gill	BamBOOM: Take the Plastic out of Takeout
M51	092-C20-H1		EarEnvSci	M	Joseph Lee	Using Daphnia Magna as a model organism to study the effects of temperature on arsenic toxicity
M50	092-C30-D1		EarEnvSci	M	David Olmo-Marchal	Effects of weather whiplash on California's environment and why radical year to year precipitation difference causes it
M49	092-C50-42	T	EarEnvSci	M	Edwin Law & Antone Jung	The effect of variations in CaCO3 structures on dissolution in acidic pH levels
M47	092-C80-A1		EarEnvSci	M	Jay Shah	Purifying Water with Household Fruits and Vegetables
M46	092-D20-91		PhysAstr	F	Ishani Das	An experimental approach to build a metamaterial based ultrathin lens for mm waves
M45	092-D30-51		PhysAstr	F	Shirina Agrawal	Effect of distance, speed, and weight on air pressure
M44	092-E10-51		ElecEng	F	Shalini Rao	A Wearable that Bridges Communication Gaps Between Support Systems and Individuals with Panic Disorder
M43	092-E30-E1		ElecEng	M	Boz Azordegan	Retrofitting Automobiles with a Portable Wind Energy Source to Reduce Gas Consumption
M42	092-E40-A1		ElecEng	F	Swathi Badrinarayanan	Migraine Meter: A Novel Device to Predict Migraine Probability
M39	092-E50-61		ElecEng	M	Fazal Mittu	Using Machine Learning for Classifying Hand Typing Gestures Demonstrated on a Flex Sensing Glove
M38	092-E60-21		ElecEng	M	Maddox Yu	Concussion Sensor with Cloud-Based Prediction Model Update
M37	092-E70-F1		ElecEng	M	Roy Gross	Designing and Testing an Ad Hoc Phased Array Antenna Network for Search and Rescue
M36	092-F10-E1		MechEng	F	Anushree Atmakuri	Designing a fiber-reinforced bending actuator to imitate the movements of a human finger
M35	092-F20-92	T	MechEng	F	Xintong (Alice) Ye & Harita Sunkara	An Innovative Method of Flood Detection at Homes
M33	092-F30-52	T	MechEng	M	Jason Shan & Sean Su	Sunglasses with proximity sensors for people who are visually impaired
M31	092-F40-12	T	MechEng	M	Saahil Gupta & Maxim Hom	Designing a Transportation Device for the Disabled to Ameliorate Their Everyday Problems
M29	092-F50-E2	T	MechEng	F/M	Braden Monroe & Charlotte Li	Re-using Rain: A Plan To Use Rain To Power Household Generators
M27	092-F60-A2	T	MechEng	F	Adreema Ahsan & Saee Pole & Alyssa Boutouchent	How to Save a Life "CPR Dummy Remodeled"
M23	092-F70-71		MechEng	M	Jaythan Dao	Vacuum Suction Powered Lifting Assistance Device
M22	092-G10-61		Math	M	Ishan Kar	A new method to compute Hadamard product of two rational functions
M21	092-H11-D1		SoftEng	M	Sherif Abdou	Using Natural Language Processing to sort documents
M20	092-H12-B1		SoftEng	F	Rajvi Khanjan Shroff	Encryption or Steganography: Comparision for data security and ease of use
M19	092-H20-A2	T	SoftEng	M	Krish Kumar & Adithya Pradeep	Know Your Earthquakes Ahead of Time With Machine Learning
M17	092-H22-71		SoftEng	M	Alan Lee	A Novel Image-Based Stock-Trading AI Algorithm
M16	092-H30-71		SoftEng	M	Abdulrahman Naveed	HealthPlus Companion App Predicting Friendly Insights via AI & ML
M15	092-H31-51		SoftEng	F	Minjeong Kim	Detecting Pain in Children with Autism using 68 Points on Facial Expressions
M14	092-H32-31		SoftEng	M	Stanley Shen	Development of a Novel Machine Learning Model to Automate the Creation of Interchangeable Wings for Multipurpose UAVs

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M13	092-H40-31		SoftEng	F	Divya Venkataraman	Picture Perfect Diet: An app to classify food products, with OCR, for recommending substitutes based on a chosen diet
M11	092-H41-H2	T	SoftEng	M	Shashin Gupta & Mehul Goel	Correlation between wildfires and hurricanes using data analysis of past hurricanes and past wildfires
L11	092-H42-F2	T	SoftEng	F	Kavinaya Rajesh & Kaitlyn Nguyen & Sahana Moogi	Planetize- Prioritize Your Planet
L13	092-H50-G1		SoftEng	M	Jeevith Chanveer	Predicting the Running Injury Application
L14	092-H51-E1		SoftEng	F	Nidhi Mathihalli	An Application to help the Visually Impaired read Money using AI/Machine Learning
L15	092-H52-C1		SoftEng	M	Neel Gajare	Deciphering American Sign Language Using Convolutional Neural Networks to Help Bridge Communication With the Deaf
L16	092-H60-C1		SoftEng	F	Samhita Srivatsan	Developing Artificial Neural Network Models to Predict Eutrophication of United States Freshwater Bodies
L17	092-H61-A1		SoftEng	F	Sanjana Ryali	Direct Access: Creating an Image Processing based Software Toolkit to Build Inclusive Spaces
L18	092-H62-81		SoftEng	M	Joseph Thomas	A Machine Learning Approach to Early Detection of Parkinson's Disease
L19	092-H70-81		SoftEng	F	Amruta Dharmapurikar	Machine Learning Aided Classification and Mechanical Sorting of Waste Material
L20	092-H71-61		SoftEng	F	Isha Jagadish	Improving Awareness of the Visually Impaired with a Wearable Device Using Computer Vision, AI, and a Voice-Driven App
L21	092-H72-32	T	SoftEng	M	Milan Rohatgi & Matthew Lee	Using AI to Create a New Generation of Music
L23	092-H80-41		SoftEng	M	Jai Sharma	"Spare the Air Day" Forecasting for Developing Countries
L26	092-H81-12	T	SoftEng	M	Shuhul Mujoo & pratik lokesh	Using machine learning and mathematical models to predict the spread of wildfires
L28	092-H82-H1		SoftEng	M	Pranav Amarnath	Fatal Journeys: Analyzing Human Migration Risks of Refugees and Asylum Seekers
L29	092-H90-H1		SoftEng	M	Ankith Madadi	REAP: Residential Electricity Analyzer and Predictor to predict power grid load and help optimize user budgets
L30	092-H91-E2	T	SoftEng	F/M	Tasha Lera & Justin Hou & Juno Kim	Lucidity: Fighting Internet Addiction through Machine Learning
L32	093-410-11		BiocheMic	M	Nikhil Kichili	Effects of Different Roof Types on the Collection of Rainwater
L33	093-420-E1		BiocheMic	F	Julia Obuchi	The Potential Antibiotic Properties of Macrocystis pyrifera (Giant Kelp)
L34	093-430-A1		BiocheMic	M	Sritej Ponna	What is the Effect of Individual Bacteriophage Genes on Gene Regulation in E. coli?
L35	093-610-21		MedHeaSci	M	Rohan Tirumala	The Effects of Curcumin, Nicotinamide and Tomatidine on the Charcot-Marie-Tooth 2A Disease
L36	094-D10-F1		PhysAstr	M	Brian Chen	Deriving the stellar mass-radius ratio of eclipsing binaries identified in joint MARVELS-Kepler Data
L37	094-D20-B1		PhysAstr	F	Sally Zhu	Supporting the Big Bang Theory by Measuring Cosmic Microwave Background Radiation in Distant Galaxies
L38	094-D30-71		PhysAstr	M	Yu-Ting Chang	Analysis of GBNCC Survey Data for Radio Pulsar Candidate Detection: Distinguishing Pulsar, RFI, and Noise Signals
L39	101-210-11		PlantSci	F	Ananya Aswani Kumar	The effects of biochar treated soil on the ability of Escherichia coli to infect plants
L42	101-220-E1		PlantSci	M	Ryan Mostafavi	The Use of Glandular Trichome Containing Plant Matter as Insecticides Against Ants
L43	101-230-92	T	PlantSci	F	Arushi Tyagi & Riya Ranjan	The Effect of Various Vitamin C Ascorbate Supplements as Protectants Against Acid Rain Damage in Plants
L45	101-250-12	T	PlantSci	M	Pranav Palleti & Shivam Pathak & Ashok Devireddy	Opti-yield AI
L47	101-260-F1		PlantSci	F	Tavleen Kaur	Improving crop health and pollinator safety using eco-friendly

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
						fertilizers, pesticides, and fire-retardants.
L48	101-270-B1		PlantSci	F	Rachel Ha	Using Gel Electrophoresis To Assess Potential Species Changes
L49	101-310-A1		AnimalSci	F	Clara Hansen	Examining the Effects of Water Temperature and Oxybenzone on the Bioluminescence and ROS of Marine Dinoflagellates
L50	101-311-81		AnimalSci	F	Annie Hong	Factors in Toxin Resistance of Marine Invertebrates
L51	101-320-61		AnimalSci	M	Dawson Xuan	Using Drosophila melanogaster as a Model Organism for Artificial Social Hierarchy Creation
L52	101-330-21		AnimalSci	F	Anoushka Lakshmi	The Effects of the Azadirachtin on the Reproductive Rates of Daphnia Pulex (water flea)
L53	101-340-F1		AnimalSci	F	Sophia Liu	The effect of a metalloprotease inhibitor on the molting and mortality of C. elegans as an anti-aneurysmal growth model
L54	101-350-B1		AnimalSci	F	Lavi Sundar	Effects of Terpene Alpha Pinene On Pain Responses Modeled in Lumbricus Terrestris
L55	101-360-71		AnimalSci	F	Shivani Madhan	The effects of L-serine intake on impaired memory in Drosophila melanogaster models of Schizophrenia
L56	101-370-31		AnimalSci	F	Divya Sundar	The Effect of E-cigarettes and Cigarettes on the Appetitive Learning of Drosophila melanogaster
L57	101-380-G1		AnimalSci	M	Prakrit Jain	Venom Regeneration Speed in Scorpions
L58	101-390-B2	T	AnimalSci	M	Sujith Pakala & Arvin Nidadavolu	The Effects of Decreasing the Amount of Blood Given on the Reproduction of the Culex Pipiens
K59	101-410-21		BiocheMic	F	Christina Dorofeev	Using UV-light to Photodegrade Bisphenol S in an Aqueous Medium and Testing the Bisphenol S on Dugesia dorotocephala
K58	101-420-F1		BiocheMic	F	Kavita Murthy	The Efficiency of Permeability of Escherichia coli to Different Macromolecules Via Ultrasonic Waves
K57	101-421-D1		BiocheMic	M	Shailesh Senthil Kumar	The Identification of a Novel Causative Agent and its Biomarkers for Alzheimer's Disease
K56	101-430-B1		BiocheMic	F	Atmaja Patil	Effects of food waste addition to broth of Rhizobium Leguminosarum and its capacity to raise interest in biofertilizers
K55	101-431-82	T	BiocheMic	M	Rishi Pasumarthi & Nathan Palamuttam	Different Types of Yeasts Effects on the Degradation of Plastics
K53	101-440-71		BiocheMic	F	Jocelyn Swift	Statistical and Cellular Analysis of Rhizopus stolonifer Growth as Affected by Potassium Sorbate Concentration.
K52	101-450-31		BiocheMic	F	Myung Suh Choi	The capabilities of various phytochemicals to inhibit bacterial quorum sensing modeled by Serratia Marcescens
K51	101-451-11		BiocheMic	F	Nithika Karthikeyan	The Effect of Bacillus subtilis and Pseudomonas putida on the Biodegradation of Polyethylene Found in Microplastics
K49	101-460-F2	T	BiocheMic	F	Jennifer Zhao & Nica Tofighbakhsh	The effect of soil moisture on the respiration of Heterorhabditis bacteriophora in gardening soil
K47	101-461-D2	T	BiocheMic	F	Tiffany Tran & Nhi (Cici) Tran	Effect of Contaminated Food Sources on Chemotaxis of Physarum polycephalum
K45	101-470-C1		BiocheMic	F	Anika Nagavara	The Effect of Different Amounts of Zinc on Asthma in Drosophila Melanogaster
K44	101-490-41		BiocheMic	M	Sasvath Ramachandran	Determining the UVA Intensity Threshold for Cryptobiosis in Hypsibius dujardini
K43	101-510-B1		BioInfo	M	Mahit Tanikella	Automatic Quantification of Lymphocytes as Prognostic Marker in Cancer Tissue

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
K42	101-511-91		BioInfo	M	Henrik Zhang	Identification of Genomic Signatures for Cancer Immune Therapy Response: Implications for Personalized Medicine
K38	101-520-62	T	BioInfo	M	Harshil Garg & Anirudh Kotamraju	Utilizing a Convolutional Neural Network for Convenient Detection of Periodontal Disease
K36	101-521-51		BioInfo	F	Anousha Athreya	Analyzing A Novel Artificial Neural Network to Predict Cystic Fibrosis Disease Progression
K35	101-530-31		BioInfo	M	Tim Jing	Predicting Pandemics: Optimizing Prophylactic Models for MDR-TB, SARS, MERS, and other Potential Respiratory Pandemics
K34	101-531-11		BioInfo	M	Armeet Jatyani	Using Machine Learning to Accurately and Efficiently Identify Brain Tumors
K33	101-540-G1		BioInfo	F	Rupali Batta	Predicting HIV-1 protease cleavage sites using machine learning algorithms
K32	101-550-C1		BioInfo	M	Ahmad Ismail	Using Machine Learning to Develop a Model for the Diagnosis of Heart Disease and Detection of Abnormalities
K31	101-560-81		BioInfo	F	Sindhu Saggeri	An application to determine the mitotic rates of tumors located in the buccal cavity by utilizing machine learning
K30	101-570-41		BioInfo	F	Veda Kamaraju	A Precision Medicine Approach to Kidney Disease: Development of a Novel, In Silico Tool for MicroRNA Biomarker Discovery
K29	101-580-H1		BioInfo	F	Sneha Revanur	A Novel Approach to Predicting and Optimizing Kidney Transplant Outcomes Using Deep Learning
K28	101-590-D1		BioInfo	F	Isita Talukdar	Applications of Artificial Intelligence and Machine Learning for Early Detection of Parkinson's Disease
K27	101-610-31		MedHeaSci	F	Madeline Ho	Testing the Effects of Broccoli and Broccoli-derived Glucoraphanin on Paralysis from B-Amyloid Aggregation in C. elegans
K26	101-620-G1		MedHeaSci	F	Alisha Kalley	Examination of Cow Ghee as a Neuroprotective Agent on C. elegans Exposed to Neurotoxin Bisphenol A
K23	101-630-B2	T	MedHeaSci	M	Aaron Tran & Andrew Vodinh-Ho	The Effect of Concentrations of Sterilization Solutions on the Denaturation of the Human Antimicrobial Protein Dermcidin
K21	101-650-41		MedHeaSci	F	Akanksha Roy	The Effects of an E-Cigarette on Brain Development in Drosophila and its Offspring
K20	101-660-H1		MedHeaSci	F	Ananya Rupanagunta	The effect of Withaferin A on improving TDP-43 induced oxidative stress in Drosophila, a model for ALS treatment
K19	101-670-D1		MedHeaSci	F	Hiranya Sundar	The effect of vanillin on oxidative stress associated with motor disabilities in a drosophila model
K18	101-710-C1		BiomedEng	M	Parv Chordiya	Computing Concentration Levels based on Absolute and Relative Brain Activity.
K17	101-720-81		BiomedEng	F	Shriya Anant	Mitigating the Impact of Eye Floaters Using Ultrasonic Waves
K16	101-750-C2	T	BiomedEng	F/M	Kaitlyn Butcher & Rishab Gupta	Enhancing the Safety of Alzheimer Patients: Utilizing BLE and CPS120 Technologies to Ameliorate the Lives of Alzheimer Patients
K14	101-760-82	T	BiomedEng	F/M	Rhea Jain & Jason Co	Multipurpose Prosthetic: Utilizing 3D printing, Raspberry Pi, and CV to Engineer Task-Specific Attachments for Amputees
K12	101-770-51		BiomedEng	M	Adarsh Ambati	Contactless, Vital Signs Monitor using PhotoPlethysmographic Imaging, Infrared Sensing Techniques, & Computer Vision
K11	102-A10-61		Chemistry	F	Sanjana Jilla	Identifying Lead-free Perovskites Using Machine Learning for High Efficiency Solar Cells

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
K10	102-A20-21		Chemistry	F	Riyaa Randhawa	A Chemical Process to Extract the Chiral Center of Ibuprofen
J10	102-A40-B1		Chemistry	F	Nethra Srinivasan	The Chemistry Behind Hair Care: The Effect of the Type of Hair Coloring and Blow-Drying on the Structure of Human Hair
J11	102-B10-F1		CheEnvEng	F	Daria Faradjeva	Inexpensive Dibutyl Phthalate Filter for the Outlet of the Septic Tank
J12	102-B20-B1		CheEnvEng	F	Samika Swamy	Effect of environmental Aluminum on neurotoxicity and novel herb-based treatment to reduce inflammation-mediated neurona
J13	102-B30-71		CheEnvEng	M	Sohan Nannra	Inexpensive detection and reduction of Pollutants in the atmosphere to lower potential risk of Cardiovascular Disease,
J14	102-B40-31		CheEnvEng	F	Mrudula Chodavarapu	Constructing an Efficient Portable Nitrate Filter Using Ion Exchange
J15	102-B50-G1		CheEnvEng	M	Diptanshu Sikdar	Novel Hybrid Multi-source Energy Harvesting Solution for IoT Devices
J16	102-B60-B2	T	CheEnvEng	F/M	Aleah Kaye Fabia & Andrew Nguyen Pham & Kerbey Augusto	How to Make Eco-Friendly Homemade Sunscreen
J18	102-B70-72	T	CheEnvEng	M	Benjamin Tran & Vincent Li	Dye-Sensitized Solar Cells
J20	102-C10-62	T	EarEnvSci	M	Eric Amith & Jordan Giang & Teradyne Nguyen	An Experimental Determination of the Optimal Forest Density to Reduce Fire Spread
J22	102-C20-31		EarEnvSci	M	Sean Miranda	The Floating House: Using Electromagnets to Levitate a House for Earthquake Protection
J23	102-C30-G1		EarEnvSci	F	Thresiamma Vazhaeparambil	The Quantitative Measurement of Microplastics from Laundry Detergents and Fabric Samples using Fluorescence Spectroscopy
J26	102-C50-72	T	EarEnvSci	F/M	Risha Koparde & Jessica Wang & Cesar Martinez	Reversing the Process of Ocean Acidification and Neutralizing Acidic Levels with Ultramafic Rocks
J28	102-D10-G1		PhysAstr	M	William Huang	A Novel Method for the Detection of Black Holes Using the Signature Flare of a Tidal Disruption Event
J29	102-D20-C1		PhysAstr	M	Krithi Koodli	Predicting the Intractable Coefficients in the Equations of Orbits of Celestial Bodies using Learning Algorithms
J30	102-D30-81		PhysAstr	M	Rakesh Mehta	Are exoplanets habitable? Determining the habitability of exoplanets
J31	102-D40-32	T	PhysAstr	F	Celine Vu Vu & Sheila Nguyen	Worth the Weight: The Affect of Arch Design on Weight Capacity
J33	102-E10-81		ElecEng	M	Joseph Seok	Infrastructure-less Vehicular Position Tracking based on RTT measurement of Wi-Fi signals
J34	102-E11-61		ElecEng	M	Yassin Kortam	VTOL Fixed-Wing Drone
J35	102-E20-41		ElecEng	M	Ojas Karnavat	Designing a public alert system that provides available exit routes when fire is detected in an enterprise facility
J36	102-E30-G2	T	ElecEng	F/M	James Pham & Vivek Atmuri & Hasitha Dangeti	Tilt-A-Type: Leveraging the Arduino UNO Microcontroller to assist individuals who lack dexterity in their hands.
J38	102-E40-D1		ElecEng	M	Saurav Gandhi	Jet-I-U: A Jetson Nano & IoT Edge Platform based AI Robotic Companion for the Visually Impaired and Elderly
J39	102-E50-91		ElecEng	M	Thomas Mathew	Using Artificial Intelligence to Create a Personal Assistant for Children with Autism Spectrum Disorder
J42	102-E60-51		ElecEng	M	Rahil Kapadia	Gait Correcting Smart Shoe Insert
J43	102-E70-H2	T	ElecEng	M	Isaac Eda & Erick Chevez	Developing and Improving the Reciprocating Electric Motor
J45	102-E80-E1		ElecEng	F	Neha Mandava	Utilizing NIR spectroscopy to create an inexpensive, non-invasive blood glucose testing system for diabetic patients
J46	102-E90-A1		ElecEng	F	Iris Zhou	wSAS: Wildfire Safety Alarm System

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
J47	102-F10-H1		MechEng	F	Cameron Bosio-Kim	A Self Contained Water Pumping System Powered by a Stirling Engine Using Heat from the Sun
J48	102-F11-F1		MechEng	M	Bohong Su	A Measuring Instrument for Fracture Rehabilitation
J49	102-F20-D1		MechEng	M	Minsoo Kim	Tennis Ball Sweeper Robot
J50	102-F21-A2	T	MechEng	M	Ngoc Nguyen & Miguel Santiago & Brendon Phuong	Earthquake Proof House Using Ferrofluid
J52	102-F30-91		MechEng	M	Dawson Chen	An Autonomous Irrigation Robot for Urban Grass Ecosystems
J53	102-F31-71		MechEng	F	Devika Sharma	Matrica; A Utility Pack For Your Phone
J54	102-F40-51		MechEng	F	Akshita Ponnuru	Raising Roofs: An Architectural Solution to Address the Homeless Crisis
J55	102-F50-H2	T	MechEng	F	Aditi Kulkarni & Redding Martinson-Bequette	Thermal sleeve for people with Cold Urticaria
J57	102-F60-D2	T	MechEng	F	Avani Kulkarni & Asmita Jerrome	Vape Detector
J59	102-F70-A1		MechEng	M	Anuttam Ramji	Using a Bubble Net System to Develop a Sustainable Alternative to Fishing Practices
H59	102-F80-61		MechEng	M	Ethan Zuo	Two-Phase Jet Impingement Cooling for Data Center High Power-Density Processors
H58	102-F90-21		MechEng	M	Aditya INDLA	Custom Farm Survey Model Based on SSD with Inception v2 & AI-Driven Harvesting Robot for Efficient Strawberry Farming
H57	102-G10-91		Math	M	Alexander Zhang	Design of an inflatable mesh of variable geometry for medical or architectural applications, using differential geometry
H56	102-H10-11		SoftEng	M	Ishaan Mantripragada	Predicting Obstructive Sleep Apnea from Electrocardiogram recordings using Machine Learning techniques
H55	102-H12-E1		SoftEng	M	Arunaabha Yadavalli	Real Time Wild Fire Tracking System Using Machine Learning Model
H54	102-H13-C1		SoftEng	F	Ria Sinha	Machine Learning Based Digital Assistant for the Deaf
H53	102-H20-D2	T	SoftEng	M	Ansh Chaurasia & Stephen He	Using Gesture Recognition and Comparison to correct Bio Mechanical Actions
H51	102-H21-C1		SoftEng	F	Jenny Le	The Use of Automation in Construction
H50	102-H23-81		SoftEng	M	Anav Mehta	ARChessAnalyzer: Augmented Reality Chess Analyzer Using In-Device Deep Learning Inference Of Physical Chess Positions
H49	102-H30-A1		SoftEng	M	Kailash Ranganathan	Improved Word Embedding Algorithms for Machine Translation of Indo-European Languages using Clustering
H48	102-H31-72	T	SoftEng	F	Maheswari Bajji & Jenny Wong	PureAir
H46	102-H32-61		SoftEng	F	Shreyaa Karan	Employing Deep Neural Networks and Data Synthesis in Dermatologist-Level Classification and Tracking of Skin Cancers
H45	102-H33-32	T	SoftEng	F	Kalyn Bui & Monaya Maaz	Automatic Adaptable Light System with Motion Sensors
H43	102-H40-52	T	SoftEng	M	Rishab Parthasarathy & Rohan Bhowmik	Quantum Optical Convolutional Neural Networks (QOCNN): Constructing an Image Recognition Framework for Quantum Computing
H39	102-H41-41		SoftEng	M	Ryan Chen	AI License and Automotive Identification
H38	102-H42-21		SoftEng	M	Aeshon Balasubramanian	Invasive Species Detector : A Novel, Portable Approach with Deep Learning
H37	102-H50-21		SoftEng	M	Kento Nishi	BlankSort - A Novel Unsupervised Approach to Keyword Extraction
H36	102-H51-H1		SoftEng	M	Veer Doshi	Enhancing Disaster Awareness by Incorporating Crowdsourcing and USGS Data in Machine Learning-driven Prediction Modeling
H35	102-H52-F1		SoftEng	F	Tami Heletz	Exploring the World of Fractals via Computer Graphics
H34	102-H61-D1		SoftEng	F	Impana Chimmalagi	Predicting and Preventing Drastic Actions by Processing Heart Rate and Behaviors and Utilizing Innovative AI Methods
H33	102-H62-B1		SoftEng	M	Arnav Mishra	Using Machine Learning and NLP to Filter Social Media for

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						Legitimate Disaster and Emergency Related Posts
H32	102-H70-B1		SoftEng	M	Shrinandan Narayanan	Forecasting orientation and paths of forest fires using a simulation-based algorithm
H31	102-H71-82	T	SoftEng	F/M	Kavya Biederman & Dylan Starink	Improving Sleep
H29	102-H72-71		SoftEng	F	Arya Rajesh	Machine-Learning Model For Detecting the Malignancy of Skin Cancer Lesions
H28	102-H80-71		SoftEng	F	Sia Agarwal	Decompress: A System that Predicts Onset of Stress and Provides Stress Management Exercises
H27	102-H81-42	T	SoftEng	F/M	Nesyah Galatin & Sidharth Dharmasanam & Yash Nasikkar	HealthEar
H23	102-H82-22	T	SoftEng	F/M	Jennifer Song & Riley Kong	Improving School Campus Traffic Flow Through Dynamic Simulation Modeling and Machine Learning
H21	102-H90-31		SoftEng	M	Anish Thalamati	Developing an application to match intruders with user published images using intelligent image technology
H20	102-H91-11		SoftEng	M	Thomas Li	Moment Localization in Videos using an Autoencoder Neural Network
H19	102-H92-G1		SoftEng	M	Vivek Bharati	Deep Learning System to Detect Sleeping Position Outside Stressors and Alert for Preventing Sudden Infant Death Syndrome
H18	103-320-72	T	AnimalSci	M	Akhilesh Chegu & Deven Shah	Behavioral and Physiological Analysis of the Effect of Chronic Blue Light Exposure on Cognitive Motor Learning in Mice
H16	103-410-41		BiocheMic	F	Natasha Matta	Effects of Organic Pesticides, Clove and Thyme, on Sericulture
H15	103-420-H1		BiocheMic	M	Jacob Liao	Effects of Increased Heat Treatment on Camponotus fragilis and its Endosymbiont Blochmannia festinatus
H14	103-440-91		BiocheMic	F	Tara Pande	Genetic vaccines using CRISPR tools to fight viruses
H13	103-450-42	T	BiocheMic	F	Taylor Hu & Hyeri (Jenna) Lee	The Effect of Triclosan and Various Other Oral Health Care Products on the Growth of Streptococcus Pyogenes
H11	103-480-A1		BiocheMic	M	Luke Zhao	The impact of serine 409/410 hypophosphorylation on ALS-associated TDP-43 aggregations and cytotoxicity in yeast.
H10	103-490-61		BiocheMic	F	Annika Viswesh	Identifying sequence elements in 5' UTR of mRNA that affect translation efficiency in the fungal pathogen H. capsulatum
G10	103-510-D1		BioInfo	F	Alice Feng	A Genetic Study of Non-Small-Cell Lung Cancer Cells with Gemcitabine Resistance and Benzo[a]pyrene Exposure
G11	103-540-11		BioInfo	M	Akshay Attaluri	In Silico Development of Novel Chemosparing Agents Targeting Antioxidative and Drug Resistance Machinery of Cancer Cells
G12	103-560-A1		BioInfo	F	Sunnie Li	Ex Vivo Expansion of Skeletal Stem Cells Using Machine Learning
G13	103-610-51		MedHeaSci	F	Shailee Nanavati	Analysis of mutated genes expressed in multiple myeloma cells resistant to the senolytic ABT-737 using microarray data
G14	103-620-11		MedHeaSci	F	Aditi Venkatraman	A Novel Non-Invasive Technique for Detecting Adenocarcinoma With the Use of Nanoparticles
G15	103-640-A1		MedHeaSci	F	Riya Gupta	Investigating genetic risk factors for late-onset Alzheimer's Disease: ABCA7 and ADAM10
G16	103-710-E1		BiomedEng	M	Jonah Tien	Brainteract: An Integrated Improvement Aiding Brain-Computer-Interfaces and Disabilities Using Visual-Evoked Stimuli
G17	103-720-A1		BiomedEng	M	Rishi Pankhaniya	Developing a machine learning algorithm to identify markers of

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
						carfilzomib resistance in multiple myeloma cells
G18	104-B10-H1		CheEnvEng	M	Tejas Prabhune	Creating Water Soluble Plastics from Renewable Resources
G19	104-C10-91		EarEnvSci	M	Surya Tallavarjula	To Remove Impurities From Drinking Water Using Readily Available Materials And Affordable Methods
G20	104-D10-11		PhysAstr	M	Franklin Wang	Detecting Near Earth Asteroids with Convolutional Neural Networks
G21	111-210-22	T	PlantSci	F/M	William Nguyen & Kenneth Nguyen & Britney Nguyen	Plant Stress and the Infrared Reflectance Spectrum
G23	111-220-G1		PlantSci	F	Charlotte Lara	Allelopathic Effects of Eucalyptus globulus, Eucalyptus viminalis, and Juglans californica on Triticum aestivum (Wheat)
G26	111-230-C1		PlantSci	F	Sally Ha	The Effect of Simulated Microgravity on the Allelopathic Potential of Helianthus annuus
G27	111-240-81		PlantSci	F	Kate Jackson	Finding Fibonacci: Does separating leaves by the Fibonacci Golden Angle optimize average sun exposure per leaf?
G28	111-310-C1		AnimalSci	M	Eric Zheng	The addition of Dystrophin on the strength of jump muscles in adult Drosophila to display reversed effects of atrophy
G29	111-320-81		AnimalSci	M	Henry Nguyen	The Effects of Larval Stress on Adult Morphology of the Greater Waxworm (Galleria mellonella)
G30	111-330-32	T	AnimalSci	F	Christina Vo & Vy Dinh & Mandy Le	Factors in Waxworm Nutrient Preference
G32	111-420-H1		BiocheMic	F	Dylan Chin	Testing the Effect of Polyethylene Microplastics on Dinoflagellates
G33	111-430-D1		BiocheMic	F	Megha Yengoti	Effect of Varying Ratios of Curcumin and Silver Nanoparticles on Biofilm Formation of Micrococcus Luteus
G34	111-440-91		BiocheMic	F	Mira Bhatt	Effects of Nitrogen Deprivation with Glucose Supplementation on Lipid Production and Biomass of Chlorella
G35	111-450-51		BiocheMic	F	Malavika Eby	Effect of Varying Levels of Apoptosis on the Efficacy of Phenytoin in Seizure-Susceptible Drosophila
G36	111-460-11		BiocheMic	F	Aditi Bharti	Studying the Permanent Effects of Antibiotics on Fruit Flies to Emulate Its Effects on Human Neurological Disorders
G38	111-470-D2	T	BiocheMic	M	Leo Bailloeul & Kenneth Meng & Rishee Gupta	Effect of increased temperature on cyanobacteria growth and photosynthesis
G42	111-480-92	T	BiocheMic	F	Connie Chen & Chanel Lim	Habituation of Physarum polycephalum in Response to Multiple Aversive Substances
G44	111-510-D1		BioInfo	M	Edmund Lam	Improving Visual Spatial Acuity through Priming
G45	111-520-91		BioInfo	F	Sidra Xu	Gene Embedding: A Novel Hybrid Approach to Somatic Mutation-Based Cancer Type Identification and Biomarker Discovery
G46	111-530-51		BioInfo	M	Annesh Ghosh Dastidar	A Deep Learning Approach to Automated Lung Cancer Radiation Planning Using GTV with Organ-at-Risk Accommodation
G47	111-540-11		BioInfo	F	Arohee Bhoja	Discovery and Classification of Novel Cancer Drugs Using Unsupervised Learning
G49	111-550-D2	T	BioInfo	F/M	Claire Tang & Francis Tang	Adding Interpretability into Automated Medical Imaging
G51	111-560-92	T	BioInfo	F/M	Michael Zhao & Grace Kuo & Andrew Yuan	Early Diagnosis and Characterization of Sepsis Using Machine Learning
G53	111-570-61		BioInfo	F	Anya Raju	Using Genome-Wide Association Studies to Identify Common Genetic Loci Between Neurobiological Disorders
G54	111-580-21		BioInfo	F	Sheryl Mathew	An Automated Diagnosis of Glaucoma Using Machine Learning
G55	111-590-E2	T	BioInfo	M	Adrienne Camat & Rafael Bucio & Eulalio Pena	An Assessment of Fingerprint Probability and Distribution as Indicators of Evolutionary Functionality

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
G57	111-610-51		MedHeaSci	F	Anjali Vaidya	The Effect of Eugenol, Cuminaldehyde,and Curcumin on a-synuclein protein aggregation in transgenic C.elegans
G58	111-611-31		MedHeaSci	F	Samskruthi Madireddy	Winning Combination Among Polyphenols, Probiotics, & Vitamins for Improved Memory and Cognitive Performance in Crickets
G59	111-620-11		MedHeaSci	F	Beatrice Mihalache	Using in vitro digestion to test the effects of microplastics on bacteria in the human gut microbiome
F59	111-630-E1		MedHeaSci	F	Nicole Krockenberger	Using In Vitro Gut Simulation to Evaluate the Effects of Various Dietary Fats on Human Gut Microbiota
F58	111-640-A1		MedHeaSci	M	Logan Morley	The Effects of Chemical UV Filters on the Development of Drosophila melanogaster
F57	111-650-61		MedHeaSci	M	Anirudh Yadlapati	What would the effects of added beta cells and calcium phosphate have on chilled insulin?
F56	111-660-12	T	MedHeaSci	F	Xingying Zhu & Pauline Rogers	Effects of Liposome delivered miRNA-142-3p in LN-18 cells on Temozolomide Treatment against Malignant Glioma
F54	111-670-F1		MedHeaSci	M	Arjun Shivkumar	Effects of e-cigarette liquid on normal mammalian cells and possible natural compounds that could neutralize its effects
F53	111-710-D2	T	BiomedEng	M	Dhruv Jatkar & Achintya Sanjay & Sachin Iyer	Determining the Viability of Cell-Compatible Organic Stents Using Bio-Printing
F51	111-720-A1		BiomedEng	F	Safaa Mouline	A Customizable Voice that Improves Comprehension of Speech for Children with Language Impairments
F50	111-730-61		BiomedEng	M	Munir Bshara	Improving Athletic Performance and Avoiding Injuries using Machine Learning
F49	111-740-12	T	BiomedEng	M	Prathik Kakarlamudi & Nathan Wei	Real Time Driver Health System
F47	112-A20-41		Chemistry	F	Olivia Colace	Synthesizing derivatives of telomere resolvase inhibitors for the potential treatment of late stage Lyme disease.
F46	112-A30-H1		Chemistry	F	Linnea Pari Leaver	Methods for Creating Potential MAO Inhibitor Antidepressants for the Treatment of PTSD-Induced Depression
F45	112-A40-D1		Chemistry	F	Michelle Lu	The Effect of Acid Reducing Medications on the Solubility of Acetaminophen
F44	112-B10-H1		CheEnvEng	M	Elias Kai Yepishin	Optimizing Efficiency of Phosphorus Extraction From Simulated Farm Wastewater Runoff Using Microorganism Consortiums
F43	112-B11-F1		CheEnvEng	M	Kaushik Tota	Intelligent Waste Stream Classification to Optimize Waste Management Processes
F42	112-B20-D1		CheEnvEng	F	Elizabeth Szeto	Developing a Bioplastic Using Biopolymer Blending and Crosslinking Techniques to Replace LDPE Plastics for Packaging
F39	112-B31-62	T	CheEnvEng	M	Duy Lam & Sihyun Jeon & Brian Kim	Quantification of Methane Presence in the Air to Determine Decomposition and Reduce Food Waste
F37	112-B40-51		CheEnvEng	F	Manjari Talasila	Effectiveness of Biosorbents in the removal of Arsenic from wastewater
F36	112-B50-11		CheEnvEng	F	Shachi Prasad	The effect of different cathodes and biodegradable source in a microbial fuel cell on the amount of electricity produced
F35	112-B60-D2	T	CheEnvEng	F	Madison Doan & Ishita Verma	Using Insoluble Plant Fibers and Starch-Based Bioplastics to Design Biodegradable Microbeads
F33	112-B80-61		CheEnvEng	F	Tharika Thambidurai	Reducing Indoor Air Pollution Using Self Cleaning Photocatalyst
F32	112-C10-91		EarEnvSci	F	Anya Chatterjee	The Effect of Microplastics on the Development of Freshwater and Land Plants
F31	112-D10-11		PhysAstr	F	Maria Korolik	Can we bend an iPhone? Highly transparent conductors based on silver nanowires
F30	112-D20-E1		PhysAstr	M	Tobias Worledge	Experimental Proof That Quantum Computing Violates the Bell Inequality

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
F29	112-D30-A1		PhysAstr	F	Karen Lei	Characteristics and Identification of an Unknown 21 cm HI emission
F28	112-E10-A1		ElecEng	M	Joshua Yang	Code 10-80: Finding and Reporting Natural Gas Leaks in Real-Time Before They Cause Damage
F27	112-E11-81		ElecEng	F	Vibha Raju	Development of a low cost novel EMF RF radiation shield and comparison to existing materials
F26	112-E12-61		ElecEng	M	Arvind Ramachandran	Using FPGAs to Design a Specialized CPU with a Custom Instruction Set
F23	112-E20-61		ElecEng	M	Sohom Roy	Drone, Mobile Robot, Tech-Augmented Cockroach, and Crowdsourced System to Find Survivors in Disaster Stricken Areas
F22	112-E21-32	T	ElecEng	F	Maria Flores & Stephanie Garcia & Mia Avalos	To Make a low cost pollution detector for Household Usage
F20	112-E22-12	T	ElecEng	F	Myky Chau & Kim Tran	Don't Lose to the Snooze: Alarm Pillow
F18	112-E30-12	T	ElecEng	F	Kristine McLaughlin & Avani Karvat & Gargi Deshpande	Detection of Seizure and Fainting Occurrences and Emergency Contact Through a Wearable Device
F15	112-E31-G2	T	ElecEng	F/M	Mark Torres & LIZBETH ESQUIVEL MACIEL & Laci Sanchez-Lineres	Automatic Control of Faucets to Prevent Household Flooding
F13	112-E40-F1		ElecEng	F	Atreyi Mukherjee	A Novel Approach to Bicyclist Safety with an Applied Arduino Sensory Network
F12	112-E41-C2	T	ElecEng	F/M	Omar Fimbres & Marlene Garcia & MARELY MORENO-CABRERA	A Low Cost Solution to Car Seat Deaths of Infants
F10	112-E50-B1		ElecEng	M	Michael Yuan	Smart Agricultural Ad Hoc Network System
E10	112-E51-91		ElecEng	M	Fabian Chavez	Idle Farming
E11	112-E60-62	T	ElecEng	F	Kaitlyn Bui & Alexandra Hanley	Peltier Tiles Create Power With Mininal Weight
E13	112-E61-51		ElecEng	F	Sakshi Kumar	An Alternative Approach to Detecting Microplastics in Water
E14	112-E70-31		ElecEng	F	Supriya Lall	A Novel Approach to Gunshot Detection using Machine Learning; year 2
E15	112-E71-11		ElecEng	F	Nithila Poongovan	A Novel Approach to Easier Accessibility of Functions in the Google Home for the Deaf and Mute
E16	112-E80-G1		ElecEng	F	Tanya Beri	Designing an Efficient Solar-Powered Messenger Bag
E17	112-E81-E1		ElecEng	F	Lydia Wang	A brain alike structure for cognitive computing
E18	112-E90-B2	T	ElecEng	F/M	Jadelynn Dao & Advit Deepak	The Detection of Hand Gestures Using a Time of Flight Sensor for a Human Interface Device
E20	112-E91-A1		ElecEng	M	Mihir Heda	Running Form Shoe Tracker
E21	112-F10-21		MechEng	M	Andrew Bernas	Recycle Sorting Robot
E22	112-F20-F1		MechEng	M	Allen Vu	A Concrete Alternative for Use in Construction
E23	112-F30-B1		MechEng	M	Rishikesh Anand	An Autonomous Bioinspired Machine Designed to Clean Up Trash Using Synthetic Octopus Suction and Gecko-Based Adhesion
E26	112-F40-62	T	MechEng	F	Elaine Huang & Belinda Chen	The Design and Construction of a Smart Device to Collect Trash From Bodies of Water
E28	112-F60-G1		MechEng	F	Arushi Patel	Using an Image Recognition API and a Robotic Fish to Map Delta Smelt Substrates
E29	112-F70-C1		MechEng	M	Nikhil Chandra	A Glove and Software Application that Translate ASL to Text Utilizing Hand Positioning and Facial Expressions
E30	112-H10-22	T	SoftEng	M	Harsh Deep & Krishay Mukhija	Using Generative Adversarial Networks to Develop Novel Inhibitors of Carcinomas.
E32	112-H11-11		SoftEng	M	Nicholas Yi	Logographic Language Detection and Recognition using a Deep Learning Approach
E33	112-H12-G1		SoftEng	M	Jiayi Liu	AIWebCoder Web Application Generation System
E34	112-H13-E1		SoftEng	M	Aryan Kaul	A novel, accurate machine learning based method of brain tumor diagnosis and classification with survival prediction

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E35	112-H14-C1		SoftEng	M	Mehrzad Gandhi	Generating fractals using Java
E36	112-H20-G1		SoftEng	M	Russel Arbore	Using GAN synthesized scans of brain tissue for improved training and performance of CNN brain tissue segmenters
E37	112-H21-E1		SoftEng	M	Shray Alag	Insights from ClinicalTrials.gov by mining mutations, mining RSids, and applying the Human Phenotype Ontology.
E38	112-H22-C1		SoftEng	M	Vardhan Agrawal	Automated Assessment of Spaceflight-Associated Neuro-Ocular Syndrome via Incidence of Papilledema and Cotton-Wool Spots
E39	112-H23-A1		SoftEng	M	Sivaramakalyan Suvarna	DeepFireMan: A deep learning based wildfire prevention system
E42	112-H24-81		SoftEng	M	Siddharth Sharma	QEML (Quantum Enhanced Machine Learning): Using Quantum Computing to Enhance ML Classifiers and Feature Spaces
E43	112-H30-C1		SoftEng	M	Dinesh Thirumavalavan	Using a convolution LSTM-based deep neural network to accurately identify and classify hate speech on Twitter.
E44	112-H31-A1		SoftEng	M	Steve Dou	A Novel Deep Learning Pipeline to Diagnose Non-Small Cell Lung Cancer
E45	112-H32-81		SoftEng	F	Anura Ghodke	Reducing Carbon Emissions through Effective Plantation by Matching Soil and Plant Characteristics in Local Ecosystems
E46	112-H33-61		SoftEng	M	Akul Datta	A Novel Method to Detect Gender Bias In Machine Learning Datasets
E47	112-H34-32	T	SoftEng	F	Vedikas Sridharan & Connie Xu	Neural Networks for American Sign Language
E49	112-H40-81		SoftEng	M	Niranjan Bhatia	Detection and classification of recyclable items to help recyclable facility robots identify and pick them up correctly
E51	112-H41-52	T	SoftEng	M	Anant Bhatia & Allen Ye	A novel intelligent drone navigation system for safe autonomous flight using a deep convolutional LSTM neural network
E53	112-H42-32	T	SoftEng	M	Vincent Lu & Weilin Sun & Aaron Truong	Cat Language Recognition With a Novel Multistage Neural Network
E55	112-H43-12	T	SoftEng	M	Ashwin Rajesh & Eric Hu	An Adaptive and Flexible Compiler Built Upon the Lambda Calculus Using a Recurrent Neural Network Model
E57	112-H44-H1		SoftEng	F	Anshika Agarwal	A Novel Real-Time Data Acquisition Solution to Expedite Climate Research for the Global Oceanographic Community
E58	112-H50-41		SoftEng	F	Anjali Singh	Emotion Detection from Facial Expressions using TensorFlow Deep Neural Network Models
E59	112-H51-21		SoftEng	M	Rohit Malhotra	IOT Mesh Network for optimizing crop yield and conserving water
D59	112-H52-H1		SoftEng	F	Nishita Belur	Detecting Bell's Palsy for Early Diagnosis of Cerebrovascular Accidents Using a Machine Learning Algorithm
D58	112-H53-F1		SoftEng	M	Samarth Girish	Chill Pill: An AI Based Mobile Application to Detect Counterfeit Medication
D57	112-H54-D1		SoftEng	F	Janya Budaraju	Using Natural Language Processing to More Effectively Conduct Qualitative Mental Health Research
D56	112-H61-F1		SoftEng	M	Joseph Zhang	Secret Sharing for Attorney-Client Data in a Multi-Provider Cloud Architecture
D55	112-H62-D1		SoftEng	M	Aditya Rao	Real-time Lane Detection using Image Analysis with Mathematical Algorithms and Machine Learning Techniques
D54	112-H63-B1		SoftEng	M	Bill Shao	Correction of Racial Bias in Neural Network Datasets
D53	112-H70-D1		SoftEng	M	Nikhil Pitta	Dynamically Determining Optimal Fire Escape Routes within Large-Scale Structures using a Deep Q-Learning Neural Network
D52	112-H71-B1		SoftEng	M	Sahith Thummalapally	Developing a novel, precise, and brisk machine learning model for

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						the prediction of sepsis
D51	112-H72-82	T	SoftEng	F	Harshini Manian & Niharika Bozza	Using Deep Learning and Image Recognition to Effectively Categorize and Dispose of Waste
D49	112-H73-71		SoftEng	M	Aadit Trivedi	RoadAlert: A Smart Device to Detect Potholes on the Road Using Machine Learning
D48	112-H81-71		SoftEng	M	Benjamin Wu	Ball on Plate Control - PID and Neural Self-Learning
D47	112-H82-42	T	SoftEng	M	Michael Peng & Yunpeng (Ricky) Wang	Plantar fasciitis risk diagnosis with machine learning analysis to encourage safe and efficient running form
D45	112-H83-31		SoftEng	M	Shashank Venkatramani	A novel mobile app to prevent proliferation of counterfeit medications and reduce DDIs, using SVM and Machine Learning.
D44	112-H90-51		SoftEng	F	Fiona Luo	Identification of Novel Antimicrobial Peptides with Designed Activity through a QSAR Based Machine Learning Model
D43	112-H91-22	T	SoftEng	M	Ganesh Pimpale & Andrew Dang	Infill Pattern and Density Optimization for 3D Printing with Analytical Physics
D39	113-210-51		PlantSci	F	Avantika Gokulnatha	Exploring the Evolution and Function of NPG1 Gene through Tomato Domestication History
D38	113-410-61		BiocheMic	F	Audrey Chang	Determining the role of RNA chaperones in buffering mutation cost in S. cerevisiae
D37	113-420-21		BiocheMic	F	Yixin Jia	Development of T-cell receptor-like antibodies recognizing HLA-DQ6-hypocretin complexes
D36	113-430-F1		BiocheMic	F	Anushka Sanyal	Intronic RNA as a Therapeutic Target in Neurodegeneration: A Multipronged Study of RNA Lariat Debranching Enzyme DBR1
D35	113-440-B1		BiocheMic	M	Saarang Kashyap	Understanding the Causes of Multiple Myeloma through EZH2 inhibition assessed by computer-based methods on microarrays
D34	113-450-71		BiocheMic	M	Michael Eng	Role of Host Cell Receptors in the Uptake of the Fungus Candida albicans. Year 2
D33	113-460-31		BiocheMic	M	iain jung	The Determination of an Optimal Dosage of antiGBM Antibodies to Track the Progression of Nephritis in NZM mice
D32	113-470-G1		BiocheMic	M	Allen Ni	The role of CYP46A1, a brain specific cholesterol hydroxylase, in neuronal cell death
D31	113-490-81		BiocheMic	F	Sanya Shah	The effect of Synthetic and Natural Sugars on 3T3 Fibroblast Proliferation
D30	113-510-F1		BioInfo	M	Russell Yang	Modeling Distant Metastasis-Free Survival: Applications to Hazard Prediction and Pairwise Gene Interaction Discovery
D29	113-511-D1		BioInfo	F	Aindri Patra	Development of a machine learning model for autism spectrum disorder diagnosis using phenotypic data
D28	113-520-B1		BioInfo	M	Andrew Lu	Fully Automated Prostate Cancer Classification to Address Extensive Underdiagnosis by Physicians
D27	113-521-91		BioInfo	F	Ruchika Dixit	Mathematically Modeling Resource Distribution Among Offspring Through Calculating Eigenvalues of Leslie Matrices
D26	113-530-71		BioInfo	F	Julia Biswas	Estimating Gut Microbiome Diversity in Mice from Microscopic Images Using a Deep Learning Approach
D23	113-531-51		BioInfo	F	Nikhita Arun	Association of Urine Biomarkers of Kidney Health with Subclinical Cardiovascular Disease
D22	113-540-31		BioInfo	F	Annamma Vazhaeparambil	An Algorithm for the Recognition and Analysis of Protein Expression During Neural Differentiation
D21	113-541-11		BioInfo	M	Kanav Mittal	Investigating the Genetic Association between Huntington's Disease and Diabetes

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
D20	113-550-G1		BioInfo	M	Akshay Manglik	A Novel Application of Convolutional Neural Networks to Detect Posterior Uveal Melanomas in Fundus Photographs
D19	113-551-E1		BioInfo	M	Arnav Jhingran	Post-hoc explainable AI method to improve accuracy and understanding of cardiac imaging for arrhythmia detection
D18	113-560-C1		BioInfo	F	Saloni Shah	Deciphering genome-wide association studies in Alzheimer's disease
D17	113-561-A1		BioInfo	M	Aalok Patwa	Predicting Recurrence in Triple Negative Breast Cancer Patients through Analysis of Tumor-Immune Micro Environment
D16	113-570-81		BioInfo	F	Manasa Pooni	Predicting MHC I peptide presentation using DNNs targeting vaccine/personalized cancer immunotherapy
D15	113-580-41		BioInfo	F	Mugdha Joshi	The Effect of Disease on the Stylophora pistillata Microbiome
D14	113-590-H1		BioInfo	M	Jiashu Chen	What is the effect of specific RNA structure of Alu elements on RNA nuclear retention?
D13	113-610-71		MedHeaSci	F	Alekhya Vadlakonda	The Effect of Resolvin D1 on H2O2-Induced Toxicity and Oxidative Stress in Daphnia Magna
D12	113-611-51		MedHeaSci	F	Ashwini Suriyaprakash	Effects of Multidrug Resistance Protein (MRP) and Metformin on Cancer Combination Chemotherapy
D11	113-620-31		MedHeaSci	F	Seung Ah Choi	Increasing the Anti-Inflammatory Effects of Budesonide for Asthmatic Patients using CEBPD
D10	113-621-11		MedHeaSci	F	Khushi Parikh	The Effect of Virtual Reality Technology on Acute Pain Analgesia
C10	113-630-F2	T	MedHeaSci	F	Arushi Agastwar & Avishi Agastwar	Biomimetic Tissue Regeneration: Activation of Wnt-3a Pathway in Presence of Bone Xenograft
C12	113-631-D2	T	MedHeaSci	M	Jayden Allegakoen & Mohan Singhal & Aaron Waltz	What is the effect of CTA based on the outcome of CTP
C14	113-641-A1		MedHeaSci	F	Richa Malhotra	Self-renewing capacity of muscle stem cells to combat aging and muscle dystrophy
C15	113-650-81		MedHeaSci	F	Claire Chen	Using Traction force microscopy to test Taxol's side effect on cellular force generation
C16	113-660-41		MedHeaSci	F	Flora Huang	Effect of BMP-9 on BMPR2 and CES1 expression in relation to pulmonary arterial hypertension
C17	113-670-H1		MedHeaSci	M	Anirudh Seshadri	Gene expression changes following onset of ferroptosis in HCC827 lung adenocarcinoma cells
C18	113-680-D1		MedHeaSci	F	Krithika Venkatasubramanian	The effect of Parkinson's Disease and the Addition of Cholesterol and Wax Esters on the Phase Transition of Human Tears
C19	113-710-G1		BiomedEng	F	Aileen Liao	Microscopic orientation of early stage post-traumatic osteoarthritic articular cartilage.
C20	114-A10-A1		Chemistry	M	Akash Dasgupta	Engendering Efficient Photoelectrocatalytic cells using LSPR with Titania Nanotube Supported Gold Photoanodes
C21	114-A30-21		Chemistry	F	Sophie Wang	A novel automated differentiation framework and its applications in accurate and fast reacting flow simulations
C22	114-A40-F1		Chemistry	F	Emily Park	Closed-Loop Recycling with Diketonamic Triketone Bonds
C23	114-B10-21		CheEnvEng	F	Anika Fuloria	Real-Time Assessment of Flash Flood Threat using Optical-Acoustic Technology
C26	114-B20-F1		CheEnvEng	F	Eshani Jha	Thiol Functionalized and Manganese Dioxide Doped Biochar for Removal of Inorganic and Organic Contaminants from Water
C27	114-B30-B1		CheEnvEng	M	Aditya Tadimeti	Machine Learning and Wildfire Burned Area: Examining the Influence of Weather, Topographic, and Socioeconomic Factors

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
C28	114-C20-62	T	EarEnvSci	F	Sanika Bharvirkar & Nitya Devisetti	Characterizing sea urchin diet composition for evaluating herbivore grazing capacity in kelp forest and barrens habitats
C30	114-C30-31		EarEnvSci	M	Anthony Maggio	An Applied Game for Flood Mitigation: Automated Level Generation and Simulation of Floods from Google Maps API
C31	114-D10-31		PhysAstr	F	Betsy Tian	Exploring Extrasolar Planetary Systems with Ultraviolet Eyes
C32	114-D20-G1		PhysAstr	M	David Zhang	Analysis of Atmospheric Interference to improve Spectral Measurement for Detecting Earth-like Planets
C33	114-E10-C1		ElecEng	M	Akhilesh Balasingam	Fast and Accurate Inference on IoT Devices: Hardware-aware Mapping of ANNs to Brain-Inspired Low-Power Circuits.
C34	114-F10-41		MechEng	M	Aditya Jaiswal	Engineering an energy efficient drone that uses flight aerodynamics to acquire and deliver payloads over long distances.
C35	114-F20-H1		MechEng	M	Avi Singh	An Experiment Analysis of Plasma Actuators on eVTOL Aircraft
C36	114-F30-D1		MechEng	F	Caitlin Gorin	Developing a Test Procedure for Layer Adhesion Strength of FDM 3D Printed Plastics
C37	114-H10-51		SoftEng	M	Josh Sanyal	Weakly Supervised LSTM RNNs for Longitudinal Breast Cancer Recurrence Prediction via Unstructured Clinical Narratives
C38	114-H20-11		SoftEng	M	Daniel Wang	SlugBot: An Intelligent Chatbot
C39	114-H30-E1		SoftEng	M	Karanvir Bhasin	Human Decision-Making Models in Games with Time Pressure and Partial Information
C42	114-H70-F1		SoftEng	F	Sachi Parikh	Development of a Machine Learning Model to Classify Rotational Angles of Prostate Cancer Histopathology Images to a 45th
C43	114-H80-B1		SoftEng	M	Emre Yavuz	The application of deep learning methods for artifact removal from angularly sparse data in SAR imaging
C44	121-210-51		PlantSci	F	Uyen-Vy Le	No Ifs, Ands, or Butts: The Effect of Cigarette Butt Litter on Root Length of Germinating Centaurea cyanus
C45	121-410-61		BiocheMic	F	Sierra Howard	Engineering a Bispecific Antibody For Use in Inhibiting Dysfunctional WNT Signaling in Cancer Cells
C46	121-420-12	T	BiocheMic	F	Leela Mahajan & Daniela Gloster	Down-regulating the production of inflammatory cytokines: Small molecule antagonists of the LPS/TLR4 signal pathway
C48	121-430-F1		BiocheMic	F	Arthi Vaidyanathan	The effect of fatty acids and albumin on type IV secretion systems to inhibit the spread of antibiotic resistance
C49	121-440-A2	T	BiocheMic	F	Jaylene Baltazar & Jemiah Zeng	The Effect of Varying Concentrations of Insulin on Osteoblast Differentiation
C51	121-450-62	T	BiocheMic	F	Mi Le & Kiana Torres Carrillo	The effects of salicylic acid and tannic acid on biofilm's quorum sensing
C53	121-460-22	T	BiocheMic	F/M	Vivian Zhu & Aaron Stevens	The effects of MG-132 combined with 9-cis, 13-cis, and all-trans retinoic acid on SH-SY5Y neuroblastoma cells
C55	121-510-F1		BioInfo	F	Ada Peschanskiy	Stability Analysis of Cytokine Storm Patient Outcomes in Acute Lymphoblastic Leukemia with CAR T-cell Immunotherapy
C56	121-520-B1		BioInfo	F	Nikitha Kalahasti	Projections of Chronic Obstructive Pulmonary Disease Incidence Utilizing Air Quality Measures
C57	121-610-71		MedHeaSci	F	Margaret Radke	Evaluating if sanguinarine and berberine can inhibit the TGF-B signalling pathway using transgenic C. elegans
C58	121-620-31		MedHeaSci	F	Anoushka Rao	Examining the Effect of a PP2A Enhancer on the Locomotive Velocity

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						of C. elegans in a Model of Neurofibrillary Tauopathy
C59	121-630-G1		MedHeaSci	F	Emerson Martin	Determining if Echinacea extract increases the hemocytes in D.melanogaster to model systemic immune stimulation
B59	121-640-C1		MedHeaSci	M	Derek Williams	The effects of changing concentrations of 9-cis and 13-cis retinoic acid on IMR 32 neuroblastoma cells.
B58	121-660-32	T	MedHeaSci	M	Zander Gay & Tristan Huynh	What is the effect of the changing concentration of pyropheophorbide-a methyl ester on apoptosis of colon cancer cells
B56	121-670-H1		MedHeaSci	F	Kami Richardson	Worms In Space: Neural Regeneration of C.elegans, Investigating Muscle and Atrophy at a Molecular Level
B55	121-710-F2	T	BiomedEng	M	Franklin Ruan & Jiayan Luo	Preparing Superhydrophobic surfaces via electroless galvanic deposition to inhibit S. epidermidis biofilm formation
B53	121-720-B2	T	BiomedEng	F	Sheryl Hsu & Allison Lam	Vaccinations for All: A Novel System that Improves the Safety, Efficiency, and Accessibility of Vaccinations
B51	121-730-81		BiomedEng	M	Edward Ross	Designing a Better Waterproof Bandage
B50	122-A11-72	T	Chemistry	F	Jacqueline Jimenez & Lilianne Craig	Bio-Diesel With Vegetable Oils
B48	122-A20-61		Chemistry	M	Aaron Feldman	Synthesis of 5-Hydroxy-4-Azaindoles and 4-Azatryptamines: Using TrkB Receptor Inhibition as a Novel Treatment for OCD
B47	122-A30-21		Chemistry	F	Sreoshi Sarkar	Synthesizing derivatives of allosteric antagonist LUF771 to downregulate LHCG receptors and inhibit steroidogenesis
B46	122-A40-F1		Chemistry	F	Sarah Yung	Using Tea Leaves as a Carbon Precursor for Hydrothermal Synthesis of Photoluminescent Carbon Dots
B45	122-A50-A2	T	Chemistry	F	Cassandra Sweet & Olivia Ih	Synthesizing Derivatives of Curcumin to Treat Alzheimer's-Related Inflammation
B43	122-A60-71		Chemistry	M	Tony Lam	Synthesizing Potential Antagonists of HTR-7 Serotonin Receptors
B42	122-A70-31		Chemistry	F	Alana Kaplinsky	Synthesis of Eudistomin Analogues Utilizing a 6-Azaindole Alkaloid Core: Potential MRSA-Specific Antibiotics
B39	122-A80-G1		Chemistry	F	Athena Burrs-President	Synthesis of Asymmetric Diamines Derived From 5-Aminoindoles As Possible Hepatocyte Regeneratives
B38	122-B10-21		CheEnvEng	M	Vittorio Pastore	Fungal-Flocculation of Scenedesmus sp. to achieve higher lipid output for biofuel production
B37	122-B11-G2	T	CheEnvEng	F	Neha Mannem & Charu Vijay	Employing Enzymatic Degradation within a Novel, Mobile Machine to Remove Microplastics from Aquatic Environments
B35	122-B20-F1		CheEnvEng	F	Eleni Bauman	Designing a Submerged Bed Fungal Bioreactor to Degrade Polyethylene Microplastics for Water Treatment
B34	122-B21-D1		CheEnvEng	F	Rithu Paramesh	Using Conductive Hydrogels as a Proton-Exchange Membrane for Inexpensive Microbial Fuel Cells
B33	122-B30-B1		CheEnvEng	M	Tyler Adams	Designing a Mesocellular Foam that Utilizes Functionalized-Amines to Capture Carbon Dioxide
B32	122-B31-82	T	CheEnvEng	F	Patricia Cornejo & Anya Prasad	Water Desalination Device
B30	122-B40-71		CheEnvEng	M	Liam McHugh	Synthesis of Ultra Absorbent Microcrystalline Cellulose Aerogels for Efficient Oil Spill Cleanup
B29	122-B50-31		CheEnvEng	F	Ashley Dang	Biodegradable Bioplastics from Starch and Mealworm-Derived

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
						(Tenebrio molitor) Chitin and Chitosan
B28	122-B60-G1		CheEnvEng	M	Anderson Wang	Engineering Solvent Free Flow Battery Electrolytes Through Eutectic Mixtures of 1,4 Benzoquinone Derivatives
B27	122-B70-B2	T	CheEnvEng	F	Elena Mujica & Kylie Akiyama	Designing an improved PceA reductive dehalogenase to more efficiently bioremediate tetrachloroethene (PCE)
B23	122-B80-81		CheEnvEng	F	Sachi Ottoes	Conversion of milk proteins to industrially useful polymers that biodegrade under mild conditions
B22	122-B90-41		CheEnvEng	F	Ava Milliken	Use of Micrococcus luteus in testing the bioremedial efficacy across polycyclic aromatic hydrocarbons (PAHs)
B21	122-C10-B1		EarEnvSci	M	Royal Huey III	The effects of soil composition on the filtration of cyanotoxins and Cyanobacteria
B20	122-C20-62	T	EarEnvSci	F/M	Brian/Kelvin Tam & Zachary Yam & Claire Chen	Predicting Atmospheric Methane Dynamics With Weather Patterns in Urban and Rural Settings
B18	122-D10-22	T	PhysAstr	F	Katherine Mekechuk & Gurmehr Klair	Determining the Constraints of the Location of a Possible 9th Planet using Dynamic System Modeling
B16	122-E10-C1		ElecEng	F	Katherine Nasif	Development of an Electro-activated Polyaniline Chemoresisting Sensor for Noxious Gas Sensing
B15	122-E20-81		ElecEng	M	Pranav Kakhandiki	Determining Organ Degeneration using Bio-Terminal Polarity
B14	122-E30-41		ElecEng	F	Aryia Dattamajumdar	Fires from Space: A robust synthetic control method and robotic system for wildfire management
B13	122-F10-41		MechEng	M	Daniel Ghasemfar	Optimizing rocket stability through a combination of thrust vector control and aerodynamic design
B12	122-F20-H1		MechEng	M	Marvin Lin	Varying electrode materials in order to improve the efficiency of ionic wind propulsion on heavier-than-air aircraft
B11	122-F30-C2	T	MechEng	M	Ishan Goyal & Aditya Sharma	Pin & Post: A solution to wildfires using a mobile application to profile hazardous vegetation growth near utility poles
A10	122-F40-91		MechEng	F	Zara Shariff	Easily Acquired Sanitation Bin via Mobile Connectivity and Audible Receiver
A11	122-F50-42	T	MechEng	F/M	Jyoti Rani & Joaquin Ortiz	VBird: Centralized Computational Drone Swarm Implementing a Novel UWB Approach for Extreme Precision in Payload Delivery
A13	122-F70-E1		MechEng	M	Govind Pimpale	Use of Prompt Criticality in Fissionable Fluids to Design a Nuclear Salt Water Rocket Nozzle
A14	122-G10-C2	T	Math	M	Suhas Prasad & Brandon Guo	Hamiltonian Cycles Generating Eulerian Polytopes: A Computer-Inspired Analysis
A16	122-G20-82	T	Math	F/M	Chaitra Raghupathi & Gautham Raghupathi	What Properties of DNA Sequencing Reads Determine the Optimal K-mer Size for De Bruijn Graph Construction?
A18	122-H10-51		SoftEng	F	Audrey Cui	From Pixels to Paragraph and Paragraph to Pixels: A Deep Neural Art Critic & Artist
A19	122-H20-H2	T	SoftEng	F	Angela Jia & Allison Jia	A Novel Approach to Improve Training Efficiency & Performance of Deep Learning Algorithms Using a Custom PID Optimizer
A21	122-H30-E1		SoftEng	M	Thomas Hale	Homework Crawler for the Valley Christian HS Homework Portal
A22	122-H40-A1		SoftEng	M	Alexander Ng	Combining surveillance-resistant networks with peer-to-peer distributed systems to create a better internet.
A23	122-H50-61		SoftEng	F	Anusha Ghosh	Translation of American Sign Language Through the Use of Computer Vision
A26	123-210-71		PlantSci	F	Amirtha Maria	The effect of cover crop species on phyllosphere bacterial communities

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Master Project List

Loc.	Proj. Num.	Team	Field	Gender	Students	Title
A27	123-510-H1		BioInfo	F	Cynthia Chen	Decoding Neural Networks: Generalizable Computational Framework to Discover Protein Sequence Motifs
A28	123-520-D1		BioInfo	M	Chinmay LALGUDI	Designing a Novel Gene Entropy-Based Leukocyte Signature Matrix to Predict Tumor Composition
A29	123-530-91		BioInfo	F	Alice Yeh	Elucidating Nanopore-Based Long-Read Sequencing Limitations By Investigating RNA Sequence and Structure Level Features
A30	123-540-51		BioInfo	M	Raghav Ganesh	Predicting and Profiling Patient Response to the Euro-Lupus Regimen through Transcriptomics and Machine Learning
A31	123-550-11		BioInfo	M	Tarun Chiruvolu	Interpretable Deep Learning Reveals Motif Syntax and Disease-Causing Mutations
A32	123-610-91		MedHeaSci	F	Maya Nayak	The effect of Tau on the behavior and protein levels of Drosophila Melanogaster as a model for Multiple Sclerosis
A33	123-611-71		MedHeaSci	F	Naviya Kapadia	Rapid Identification and Optimization of T-Cell Receptors Recognizing Tumor Neoantigens
A34	123-620-51		MedHeaSci	F	Lakshmi Ramesh	The Impacts of Caffeine on Heart Rate Physiology of D. magna
A35	123-650-A1		MedHeaSci	F	Michaela Yip	Developing a Metabolic Intervention Strategy to Overcome Retinoic Acid-Resistance in Neuroblastoma Cells
A36	123-670-21		MedHeaSci	F	Michelle Kwan	Characterization of the Effects of Tau Uptake on Functional Connectivity of in-vitro Neuronal Networks
A37	123-680-F1		MedHeaSci	F	Chaelee Park	The effect of morphine on mitochondrial function and neural inflammation following ischemic stroke
A38	123-690-B1		MedHeaSci	M	Jason Chen	Aerosol Treatment of Inflammatory Symptoms in Asthma Airways with an Inhibitor of Soluble Epoxide Hydrolase
A42	124-A10-B2	T	Chemistry	F	Eileen Ho & Meera Suresh	3D Printing of Carbon Aerogels for Supercapacitors
A44	124-A20-81		Chemistry	M	Alexander Guh-Siesel	A Method for Treating Celiac Disease: Synthesis of Small Molecule Inhibitors of the HLA-DQ2 Heterodimer
A45	124-B10-32	T	CheEnvEng	F	Ellen Guo & Kathy Xing & Luisa Pan	Temperature- & Solubility-Dependent Desorption of Linearly Combed DNA from Polymer Substrates for Ordered Fragmentation
A47	124-B20-H1		CheEnvEng	F	Madison Huynh	Formation of Biologically Renewable Jet Fuel from 1-Hexene Cross-Metathesized Saltwater Plant Oils
A48	124-B30-D1		CheEnvEng	F	Shloka Janapaty	Optimization of Distillation Technology and Graphene Oxide Membranes for Efficient, Low-Cost Methanol-Water Separation
A49	124-D10-51		PhysAstr	F	Riya Shrivastava	Identifying Photometrically Variable Stars in the Andromeda Galaxy
A50	124-D20-H2	T	PhysAstr	F/M	Emily Zhou & Justin Du	Automated Search for Globular Clusters in Virgo Cluster Dwarf Galaxies Using Convolutional Neural Networks (CNN)
A52	124-D30-E1		PhysAstr	M	Kavish Trivedi	Optimizing Power Generation in Pressure-Driven Ion-flow in Nanopores
A53	124-F10-61		MechEng	M	Luke Sage	Examining mechanical properties of 3D printed chainmail textile structures
A54	124-F20-21		MechEng	M	Daniel Kim	A Kirigami-based, magnetically actuated soft gripping robot
A55	124-H10-71		SoftEng	F	Emily Zhou	Predictions of Fuel Ignition Delay Times Using an Artificial Neural Network
A56	124-H20-22	T	SoftEng	M	Benjamin Rubinstein & Joshua Hejna	Automating Dynamic Thin-Film Interferometry Using Convolutional Neural Networks
A58	124-H30-G1		SoftEng	F	Swati Goel	Identifying Fake News Sources on Twitter Using Network Analysis and Machine Learning

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Loc.	Proj. Num.	Team	Field	Gender	Students	Title
A59	124-H40-C1		SoftEng	M	Bidipta Sarkar	Data Compression Through Empirical Approximations of Kolmogorov Complexity