

MITTIC Cohort: Spring 2022 and Fall 2023

Team PowersIO & Hercule-Q



Hannah LaCon

Notable Successes

I greatly appreciated this enriching experience [NASA MITTIC]. Following the MITTIC competition, I have successfully advanced the innovation by securing approval for four NASA IPs. As part of the progress, I've assembled a dedicated team of students from NCAT (North Carolina Agricultural and Technical State University) and Hampton University to contribute to the company's development. This support has enabled us to expand our innovative ideas, exploring diverse approaches to provide wireless charging solutions. Our team is actively engaged in the development of a prototype for our product and is currently in the fundraising phase. Hercule-Q, our company, has gained acceptance into several accelerator programs and incubators, and we are proud to announce our backing from the local SBDC.

Hampton University
Entrepreneurship | Class of '23

MITTIC Cohort: Fall 2022



Team PiezoPace



Riley Keck

Notable Successes

Participating in the MITTIC has not only brought recognition to our university's new engineering department but has also showcased our students' skill and potential on a national platform. Winning the competition not only validates our commitment to innovation but also underscores the talent and dedication from our team. Since our participation in MITTIC, our project has continued to gain momentum as we actively seek collaborations with industry partners, research institutions, and governmental agencies. The recognition and credibility I gained through the competition have opened doors to valuable networking opportunities. Personally, the competition has helped my professional profile. The experiences I gained from MITTIC has enhanced my candidacy in engineering field enabling me to pursue rewarding career paths and make meaningful contributions to the industry.

University of St. Thomas
Mechanical Engineering | Class of '24

MITTIC Cohort: Spring 2019



Team Indigeneers



Victoria Charley

Notable Successes

After MITTIC, I was able to participate in other student challenges such as the American Society for Precision Engineering (ASPE) and the Solar Decathlon. I also completed two summer internships with Sandia National Laboratories in CAD design and in concentrated solar power. While still an undergrad, I became a student Fellow with Purdue University and worked on building solar hats that could detect harmful UV rays. At the same time, I worked as an Electrical Engineering Intern with Navajo Tech where I worked on a project called Healthy Hooghan. This project was most successful for me because it allowed me to work with the community and my people in finding ways to reduce household pollution and asthma symptoms in Navajo Children. This project later led to two publications in the International Journal of Electrical and Computer System Design. After graduating from Navajo Tech, I was able to secure a year-round internship which later developed into an Electrical Engineering position at Sandia National Laboratories. I am currently working on my master's degree in Electrical Engineering concentrating on Nuclear Safety and will be the first Navajo woman to graduate with an MSEE degree from Navajo Tech.

Navajo Technical University
Electrical Engineering | Class of '22

MITTIC Cohort: Spring 2022



Team hydroPONDS



Toshiro Tokunaga

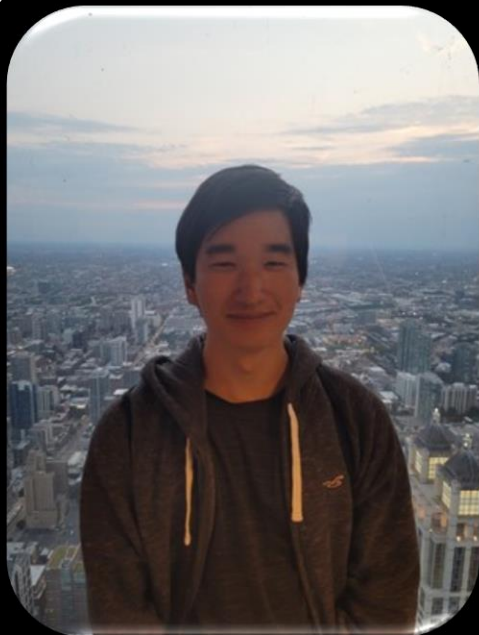
Notable Successes

After completing MITTIC, I was selected as a finalist in the NSF's Community College Innovation Challenge, and I presented research on a novel HIV treatment using a shock-and-kill therapy at the Library of Congress in Washington, D.C. I spent the summer afterwards at Portland State University (PSU), investigating discrepancies between self-reported greenhouse gas inventories of cities and counties with bottom-up, peer-reviewed FFCO2 datasets -- I presented my findings at the American Geophysical Union (AGU) conference last year. In the fall, I began interning at NASA Langley Research Center, where I reviewed current object detection, instance identification, and class segmentation models for digital replications and predictive models for ML-based simulations, and how they could be applied to an Earth Science Digital Twin (ESDT). Currently, I intern at NASA Goddard Institute of Space Studies, where I am developing and parameterizing models of the light absorption of phytoplankton in the ultraviolet (UV) wavelengths in preparation for the upcoming PACE satellite missions.

Santa Monica College
Environmental & Computer Science | Class of '24

MITTIC Cohort: Spring 2019

Team El Camino



Jae Won Hwang

Notable Successes

I was part of El Camino College's team for the inaugural MITTIC competition. After doing MITTIC, I had a couple internships with NASA. One was a business partnership internship at NASA Ames Research Center as a direct result of participating in MITTIC. And I spent two semesters as a Propulsion Safety and Mission Assurance intern on the Artemis Service Module at NASA Glenn Research Center. Additionally, I transferred to UC Berkeley as a Mechanical Engineering major from my community college in 2021 and have an internship lined up at Tesla for this upcoming spring semester.

University of California, Berkeley
Mechanical Engineering | Class of '24

MITTIC Cohort: Spring 2022



Team AERISS



Khali Crawford

Notable Successes

Since MITTIC, I completed my second internship with the U.S. Naval Research Laboratory (NRL). I also participated in an HBCU Carolina Case Challenge and was selected to attend the Thurgood Marshall College Fund Leadership Institute in New York City. It was there that I was able to connect with major corporations, like CATERPILLAR, which also offered me a summer internship in Nashville, TN. I have been keeping myself busy and loved being a part of MITTIC 2022!

Fayetteville State University
Computer Science | Class of '23

MITTIC Cohort: Spring 2022



Team AERISS



Kaitlin Angelini

Notable Successes

Since the MITTIC Competition, I interned with NASA Ames during the summer. What an honor it was to intern for NASA. Since my internship, I have taken on two roles at Fayetteville State University; one as an Academic Advisor, and the second as a lecturer in the department of graduate and professional studies in business. In the near future I'm looking into starting my PhD. Lastly, I continue to work with start ups to provide council and direction. I'm always trying to find ways to grow and help others.

**Fayetteville State University
Business Administration | Class of '22**

MITTIC Cohort: Spring 2022



Team HydroPONDS

Notable Successes



After MITTIC, I had the honor to work at the NASA Ames Research Center as an intern. This was a tremendous work experience and sparked an interest to continue working within the avionics and aerospace industries. So, I am very humbled and thrilled to announce that I will be an intern at Boeing next summer! This is a wonderful opportunity that could not have been done, I believe, without my prior experience with NASA. I'd love to work again with NASA in the future as I continue to pursue my bachelor's degree.

Anna Diaz

Santa Monica College
Business Finance | Class of '24

MITTIC Cohort: Spring 2019



Team El Camino

Notable Successes



My MITTIC internship was my first opportunity at NASA and it really paved the way for my success. Since my MITTIC Internship at NASA Ames, I've gone on to do an additional 3 NASA internships at AFRC, GRC, and JPL. From my internship experience, I was able to successfully obtain a Pathways position at NASA Marshall and even went on to transfer to another Pathways program at NASA Goddard, where I've been offered opportunities to convert full-time within our Flight Systems Integration & Test Branch.

Marco Marrufo

**University of California - Long Beach
Electrical Engineering | Class of '23**

MITTIC Cohort: Spring 2022



Team SAVER

Notable Successes



Participating in MITTIC allowed me to receive a Data Analytics internship opportunity at the NASA Ames Research Center. Although I had worked with data science in space applications previously, this internship jumpstarted my passion for data science. Now, I am continuing that passion by studying AI at UTSA and researching new machine learning algorithms. Having worked with the SBIR/STTR program at NASA showed me how much innovation is in AI, and I am excited to embark on my journey with my research.

Katie Kim

University of Texas, Austin
Aerospace Engineering | Class of '23

MITTIC Cohort: Spring 2022



Team hydroPONDS



Frank Alas

Notable Successes

Participating in MITTIC was a very transformative experience for me in my educational career. It gave me the chance to learn how to be an effective team member, especially during the pandemic where things were done virtually, and more importantly, it changed the way I approach a problem that I am faced with.

After MITTIC I had the opportunity of interning at NASA Jet Propulsion Laboratory (JPL) and currently doing mentor-guided research at the California Institute of Technology. MITTIC was one of the key steppingstones in opening doors and I am very grateful for that.

Pasadena City College
Aerospace Engineering | Class of '24

MITTIC Cohort: Fall 2022



Team Frankenstein's Gear



Rune Norderhaug

Notable Successes

After experiencing MITTIC and the different NASA programs, I have been able to earn side degrees and build on the skills I utilized during MITTIC to interconnect with my past experience with hackathons and startups. With this, I was able to gain and develop both my research and entrepreneur side to a point where I could interconnect them. I am now attempting to apply for various NASA MITTIC as well as internships from the Buck Institute in order to gain more direct research experience that can allow me to use the skills and connections I gained from MITTIC. I have also been exploring different programs such as the Stacks grant and Venturewell.

College of Marin
Biology | Class of '25

MITTIC Cohort: Fall 2023



Team BREATHE



Notable Successes

During my participation in the NASA MITTIC competition, I had the incredible opportunity to explore various facilities at NASA Johnson Space Center. One highlight was the tour of the Mission Control Center, where all space flight missions are overseen. Another fascinating experience was visiting the NASA Buoyancy Laboratory, home to the largest pool in the United States and where astronauts undergo training. Witnessing astronauts in training was truly awe-inspiring. Moreover, I had the chance to explore NASA's art unit, where we observed the intricate process of creating astronaut suits and witnessed the operation of 3D printers. The trip to NASA Johnson Space Center was not only educational but also allowed our team to bond more closely, creating lasting memories. I greatly appreciated this enriching experience.

Lael-River Williams

Santa Monica College
Physics (Math and Engineering) | Class of '24

MITTIC Cohort: Fall 2023



Team UPETTS



Notable Successes

Participating in MITTIC enabled me to secure my first internship at NASA Ames Research Center (ARC). Here, I am engaged in a cybersecurity initiative for Urban Air Mobility (UAM) and a Diversity Equity Inclusion & Accessibility (DEIA) project. MITTIC has equipped me with the essential abilities to articulate my thoughts and emerge as a capable leader amidst a team encompassing diverse backgrounds and disciplines. It has reshaped my approach to tackling intricate concepts, simplifying them, and devising practical, enduring solutions. After completing MITTIC, I've had the chance to refine these skills through my involvement in various campus extracurriculars, including Formula Racing at UC Davis (FRUCD) and the Students for the Exploration and Development of Space (SEDS) Chapter at UC Davis. Additionally, I've made the decision to pursue a Certificate of Entrepreneurship via the UC Davis Student Startup Center, aiming to broaden my understanding of entrepreneurship further.

Aidan Mateo Guerra

University of California, Davis
Aerospace Science/Engineering and Mechanical Engineering
Class of '23

MITTIC Cohort: Fall 2023



Team UPETSS



Eleana Hobson

Notable Successes

Participating in MITTIC gave me the privilege of working with The Aggie Space Initiative, a chapter of The Students for the Exploration and Development of Space (SEDS), here at UC Davis as the Administrative Assistant and Outreach Coordinator. I am in pursuit of participating in the NASA L'Space program, internships with NASA, and Team Challenges such as MITTIC, in the future. The experience and knowledge that I acquired from the MITTIC experience has been truly invaluable and I look forward to applying it in my future endeavors.

University of California, Davis
Geology and Aerospace Engineering | Class of '27

MITTIC Cohort: Fall 2022



Team

Frankenstein's Gear



Jacqueline Palma

Notable Successes

I have contributed to the field of aerospace engineering by utilizing the knowledge and abilities I acquired via the MITTIC program. I have worked on projects that have improved the efficiency of aerospace manufacturing processes, designed and optimized spaceship structures, and developed cutting-edge propulsion systems. These contributions have advanced aeronautical technology and aided in the advancement of space exploration. I have written and co-written research publications for esteemed proposals and conferences, building on my research experiences throughout the MITTIC program. New methods, discoveries, and understandings from my study have been shared through these. I have advanced the understanding and application of computer science and aerospace engineering by adding to the corpus of knowledge in these fields.

City College of San Francisco
Computer Science | Class of '24

MITTIC Cohort: Fall 2023



Team UPETSS

Notable Successes



I loved touring the Neutral Buoyancy Lab and visiting the ISS Mission Control!

Notable Successes since MITTIC: 2024 Matthew Isakowitz Fellow

Shreya Chandra

**University of California-Davis
Aerospace Science and Engineering | Class of '26**