# Mahatru Miryala

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## Experience

#### Quality Engineer Intern - Arthrex, Santa Barbara

June 2025 - Sept 2025

- Learned **Agile** methodologies and worked with IT, developing business justifications, to evaluate **Jira** and **Workfront** and roll out to support team workflows and improve project timelines.
- Supported audit preparation, worked with Quality Control to inspect incoming parts, wrote Work Instructions.

#### Test Engineer Intern - Spectaire, Boston

June 2024 - Aug 2024

- Developed Python and SQL software infrastructure via PostgreSQL to test units and save collected data to local database while standardizing code base and writing documentation and protocols to scale future software development work within the company.
- Involved with assembly of product before shipment to clients, and hand delivering units to clients around the country as a representative of the company.

#### Undergraduate Research Assistant - Robomed Lab, Atlanta

Aug 2023 - Dec 2023

- Research and development of robotically steerable guidewires for endovascular and cardiovascular applications.
- $\bullet$  Improved image distortion algorithm runtime by 92%, created and soldered PCBs for mechanism assembly for animal testing.

#### Founder and Sole Developer - Web Wizards Inc., Boynton Beach

March 2023 - Present

- Designed and launched websites with SEO and cybersecurity practices which boosted customer satisfaction by 42%.
- Proactively advertised to and engaged with local businesses, resulting in a 30% boost in customer conversion.

#### Undergraduate Research Assistant - WEAR Lab, Orlando

Feb 2022 - Aug 2023

- Spearheaded research leveraging object recognition, hand-tracking, and LiDAR to empower mobility in blind people.
- Used Convolutional Neural Networks and Hidden Markov Models in revolutionary gesture-to-sound conversion for the military.

## Projects

### Astroject, A NASA Senior Design Project - Project Manager

Aug 2024 - Dec 2024

- NASA sponsored injectable system to deliver medication to astronauts through space suits without damaging integrity.
- Served as team's project manager to coordinate resources and efforts to make deadlines.

## BME MedTech Hackathon - Team Lead

Feb 2024

- 1st place submission in the Occupational Therapy track, designing and manufacturing "The Cube", a device consisting of interchangeable faces with games to train fine motor skills in pediatric patients.
- Developed skills in Fusion 360, Human-Guided Design Principles, Computer-Aided Design, and 3D Printing.

#### Parkinson's Detection Device - Lead Developer

Jan 2023 - May 2023

- Led a team of 6 to develop an Arduino device that detects Parkinson's Disease early by tracking gait and uploading collected accelerometer and gyroscope data to website for machine learning analysis.
- Created website, databases via AWS, Arduino software, and AI model with TensorFlow.

## NASA L'SPACE Mission Concept Academy - Astrobiologist

Jan 2022 - April 2022

• With the support of NASA engineers, my team developed and presented a 78-page mission document displaying our comprehensive overview on a mission we created: identifying lunar oxygen deposits. I designed logistics, systems, and protocols.

#### **HackGT 9** - Lead SDE

Oct 2022

- 1st place submission, led a team of 4 to create a website supporting wildlife conservation through hosting wildlife live-streams found around the web.
- Compiled streams from YouTube with a JavaScript web-scraper, and created an Ethereum-based cryptocurrency and NFT line.

## Education & Extracurriculars

## Georgia Institute of Technology: Atlanta, GA

Class of 2025

- Biomedical Engineering BS, Industrial Design Minor / Computer Science
- Graduated Honors With Research Distinction

#### BSA Troop 125 - Eagle Scout

2014 - Present

- Planned, developed, and led personal community service project which fundraised \$1,100, and oversaw 30+ volunteers over 180+ hours in the construction of a dog agility course to be used in a local veteran support dog-training program.
- Consistently elected to lead scouting activities and establishing a link of communication between adult leaders and the troop.
- Managed the troop website and its weekly email newsletter. Streamlined the process to ensure all parties were up to date.

## Skills

Technology: Java, C, C++, Python, HTML, CSS, JS, SQL, MATLAB, PHP, LaTeX, Fusion360, SolidWorks, GD&T, V&V, RCA Soft Skills: Management, Written/Verbal Correspondence, Presentation, Optimization, Data Analytics, Industrial Design