
EDUCATION

UNIVERSITY OF CENTRAL FLORIDA

Bachelor of Science in Computer Science, Minor in Mathematics

Cumulative GPA: 3.599

Graduation Date – May 2027

Honors & Awards:

Burnett Honors College, Honors Undergraduate Thesis Scholarship (1 of 4 recipients in College of Engineering and Computer Science),
Top Ten Knights, Florida Academic Scholar, 30% above average on Foundation Exam

EXPERIENCE

SOFTWARE, AUTOMATION, GENERATION, AND ENGINEERING LAB

Undergraduate Research Assistant

Orlando, FL

May 2025 – Present

- Construct a dataset to create new benchmarks for tools.
- Recovered legacy Android apps for empirical analysis.
- Collaborate with expert faculty and graduate students.
- Design evaluation metrics to assess the effectiveness of previous tools.
- Co-Author papers

SUMMER INSTITUTE AT UCF

Computer Science Teaching Assistant

Orlando, FL

June 2025 – July 2025

- Teach difficult but fundamental programming concepts, including data structures and algorithms, to high school students.
- Assist students with hands-on coding exercises, debugging, and problem-solving strategies.
- Provide individualized support to ensure comprehension of core computer science principles – including meeting one on one.
- Implement code in Python and C++.

KNIGHTS EXPERIMENTAL ROCKETRY

Team Lead of Data Acquisition

Orlando, FL

Aug 2023 – March 2025

- Designed and built a thrust measurement system for an ion propulsion project, developing a custom test stand and thrust balance.
- Implemented data acquisition software to read voltage inputs, calibrate thrust-voltage relationships, and analyze results.
- Integrated sensors and hardware, ensuring accurate and quantifiable thrust measurement and real-time data collection – one of the only undergraduate teams in the country to create this system.

PUBLICATIONS

- J. Mahmud, **S. Pandey**, N. De Silva, A. Dipongkor, J. Wu, O. Chaparro, M. Fazzini, and K. Moran, “Automated Program Repair of UI-centric Android Bugs: How Far are We?,” in *Proceedings of the 35th ACM SigSoft International Symposium on Software Testing and Analysis (ISSTA 2026)*, Oakland, California, 2026. (**23.6% acceptance rate**)
- First Author. Paper under double-blind review at a top-tier software engineering conference. Advised under Dr. Kevin Moran.
- Second Author. Paper under double-blind review at a top-tier software engineering conference. Advised under Dr. Kevin Moran.

INVITED TALKS

- Co-Presented “Automated Program Repair of UI-centric Android Bugs: How Far are We?” at ISSTA 2026

Oakland, CA

PROJECTS

CROCHET CHART READING TOOL

ML Research Lead

Orlando, FL

Aug 2026 – Present

- Building a novel tool that can parse and understand crochet charts
- Leading ML data collection, annotation pipeline, preprocessing, and model training
- Utilizing CVAT and YOLO for annotation and training.

THRUST MEASUREMENT SYSTEM

C, Python, Arduino

Orlando, FL

Aug 2023 – March 2025

- Processed hundreds of voltage readings per second for real-time thrust measurement.
- Designed and built a thrust measurement system, integrating sensors and hardware for real-time data acquisition.

SKILLS & INTERESTS

Certifications & Skills: Microsoft Azure, GitHub, PostgreSQL, **Backend:** C++, Python, Django, Java, C, **Frontend:** React.js, HTML, CSS
Interests & Hobbies: Competitive Programming, Swimming (100m Breaststroke), Tennis, Football (Lions fan), F1