

Faris Abdelrahem

EDUCATION

University of Central Florida

Bachelor of Science in Computer Science

May 2027

Orlando, FL

- **Relevant Coursework:** Advanced Data Structures and Algorithms, Computer Organization, Systems Software, Security in Computing, Object-Oriented Programming
- **Organizations:** Knight Hacks, National Society of Black Engineers (NSBE), Society of Hispanic Professional Engineers (SHPE)

EXPERIENCE

Knight Hacks VIII Organizer

University of Central Florida

January 2025 – Present

Orlando, FL

- Planned hackathon experience with 600+ expected hackers, organizing volunteers, and developing logistics for the event
- Communicated with sponsors to help fund the event, collaborating with them to create engaging workshops and panels

Software Engineer Intern

Pronto Mowers

August 2024 – Present

Remote, Orlando, FL

- Developed **Python** scripts to consolidate data from an **FTP** server, **SFTP** server, and a website into a **MySQL** database
- Parsed 10,000+ web pages utilizing **Selenium** and **BeautifulSoup4** to extract relevant data from a partner website
- Optimized web-scraping script from 200 to 333 pages a minute using parallel processing, improving throughput by 66%
- Managed file transfer and data parsing from 30+ files daily, extracting 100,000+ entries from CSV files

Programming Instructor

iDTech

March 2024 – August 2024

Remote, Orlando, FL

- Directed lectures in **Java** and **JavaScript** for classes of up to 12 students, developing programming fundamentals
- Collaborated with instructors to design courses for effectively growing students' object-oriented principles, increasing student retention up to 75%
- Produced 15+ example projects to strengthen students' programming fundamentals and introduce them to simple data structures, empowering them to design and implement Java classes

PROJECTS

aiSight | *Python, React Native, TypeScript, Expo, YOLOv11n, ONNX Runtime, Git*

- Spearheaded 6-person team using **Agile methodologies** to develop caretaker glasses and app combo that identifies objects and verbally relays scenery to the user
- Implemented iOS and Android compatible builds through **Expo** and **React Native**, developing a responsive UI in **TypeScript**
- Programmed ESP32 micro-controller in **C++** to send video data over Bluetooth and LTE data

Overphone | *Python, SignalWire, Hugging Face, BERT, Microsoft Azure TTS, Git*

- Placed 2nd at Knight Hacks VII for BNY Mellon's AI Fraud Detection Challenge with an AI overflow call handler that responds to user prompts in under 3 seconds, improved from an original 5 seconds
- Streamlined development process by designing modular system architecture, resulting in efficient development within 36 hours
- Constructed an AI Orchestrator system that integrates the **OpenAI API** and **RoBERTa** models with the user input module and the **Microsoft Azure TTS** module to generate responses within 1 second to ensure a smooth user experience
- Deployed RoBERTa model to enhance security through modular context requests in under 500 milliseconds; down from 1 second, allowing for responsive data fetching without compromising security

FairShare | *React Native, Expo, JavaScript, Docker, Microsoft Azure, Git*

- Placed 1st at ShellHacks 2024 for MLH Best DEI Hack with a banking app designed to assist migrant families in navigating the American financial system
- Translated **Figma** design to phone app developed in **React Native** and **JavaScript** to create an accessible user experience
- Utilized **Nodemailer** to create an API allowing users to share an invoice split up to 10 ways, sending emails within 700 milliseconds, improving user satisfaction

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (MySQL), JavaScript, TypeScript, HTML/CSS, GoLang

Technologies: React, Node.js, Vite, Tailwind CSS, Next.js, Selenium, Nodemailer, SQLAlchemy, Paramiko, Discord API

Tools: Microsoft Azure, Git, GitHub, Docker, Agile Methodologies, Visual Studio Code, Hugging Face,