# Hassan Moustafa

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### **EDUCATION**

## **B.S.E** Computer Systems Engineering

**Expected December 2025** 

Arizona State University, Tempe, AZ

3.60 GPA

#### TECHNICAL SKILLS

**Languages/Frameworks:** Java, Python, C++, C#, Swift, JavaScript, Node.js, AngularJS, HTML, CSS, SQL, Spark, MongoDB, PostgreSQL

Developer Tools: GitHub, Git, Bitbucket, Xcode, DataGrip, Postman, Firebase, Visual Studio Code, Android Studio, Jenkins

### PROFESSIONAL EXPERIENCE

### Software Engineer Intern, Dell Technologies

May 2024 - August 2024

- Engineered an AI-driven virtual assistant using advanced natural language processing techniques and integrated cloud-based services, enhancing customer interactions and positioning the solution for future product development, accelerating time-to-market by 4 weeks.
- Designed and implemented a C# application with a custom chat interface, utilizing WPF for desktop UI and RESTful APIs for backend services, significantly improving the user experience.
- Developed a robust plugin system using C# and .NET, facilitating seamless integration between enterprise systems and ensuring operational reliability, with plans for future product release.
- Conducted comprehensive unit and integration testing with NUnit and Postman, validating component reliability and performance following best practices in software quality assurance.

## **Software Engineer Intern, Dell Technologies**

May 2023 – August 2023

- Developed a high-performance C# API to enable real-time data retrieval and seamless communication between frontend and backend components for the Dell Optimizer project, improving system efficiency and scalability by 35%.
- Optimized data management processes using DataGrip and PostgreSQL, which streamlined complex data set handling and enhanced data-driven decision-making capabilities.
- Led rigorous security and quality assurance testing for 4 APIs, ensuring 100% robustness and production readiness, resulting in zero post-deployment issues
- Facilitated Agile Scrum processes by utilizing tools like Jira, promoting effective team collaboration, and ensuring timely project delivery.

## Computer Support Specialist, ASU Herberger Institute for Design and the Arts

June 2022 – November 2023

- Spearheaded comprehensive technical assistance for a community of 300+ university faculty, staff, and students, demonstrating exceptional problem-solving skills and a customer-centric approach.
- Installed and configured over 90 new systems, significantly enhancing the university's technology infrastructure, leading to a 25% increase in operational efficiency.

### ACADEMIC PROJECTS

"Drone Nav"

February 2023 – May 2023

- Designed and deployed a Python-based system that streamlined drone fleet management, increasing resource utilization by 30% and improved operational reliability.
- Implemented intelligent scheduling algorithms that dynamically adjusted drone availability, optimizing operations and enhancing the overall effectiveness of the drone photography service.

## Software Engineering Fellow, Headstarter AI

August 2024 – September 2024

- Built and deployed 5 AI projects in 5 weeks, attracting over 500 active users, with active participation in hackathons.
- Collaborated with teams to leverage AI-driven solutions, leading to the development of innovative applications that were recognized for their potential to address real-world challenges.

## PROFESSIONAL INVOLVEMENT

## Fulton Liaison, National Society of Black Engineers (NSBE)

January 2023 – May 2023

• As Fulton Liaison, I demonstrated project management, communication, and leadership skills by representing engineering students, bridging the organization and the engineering department, and connecting students with industry for networking and internships.

Member, ColorStack February 2024 – Present