# **Ekagra Gupta**

New York, NY | +1 (602)-515-5268 | Portfolio | egupta3@asu.edu | LinkedIn | GitHub

#### **EDUCATION**

#### Arizona State University, Tempe, AZ

Bachelor of Science in Computer Science

May 2026 (Expected)

GPA: 4.0/4.0

**Relevant Courses:** Data Structures and Algorithms, Software Engineering, Operating Systems, Object-Oriented Programming, Database Management, Machine Learning, Cybersecurity, Distributed Systems.

#### **WORK EXPERIENCE**

### **Edupoint Educational Systems**

Phoenix, AZ

Software Engineer Intern

August 2024 - Present

- Optimized authentication workflows by creating efficient SSO scripts with ReactJS and Express.js while integrating MongoDB databases; delivered seamless login experience and enhanced accessibility for over 5.5 million students.
- Implemented a comprehensive student attendance tracking feature in the LMS using C# (.NET) and SQL databases.

### **Carnegie Mellon University**

Pittsburgh, PA

Software Engineer Research Assistant

June 2024 - August 2024

- Analyzed collaboration in Machine Learning pipelines by reviewing GitHub repositories and model deployment in opensource projects using Git and Docker to identify integration challenges between data scientists and software engineers.
- Developed tools using Flask, TensorFlow, and REST APIs to automate ML model testing and document expectations, improving cross-team communication and reducing production deployment errors by 25%.

Arizona State University

Tempe, AZ

Software Engineer

March 2023 - June 2024

- Developed **automation scripts in Python** and conducted regular software updates to ensure smooth functioning of hardware and software systems, resulting in a **20% increase in system efficiency** and reduced manual intervention.
- Diagnosed and resolved over **200 complex technical issues** on classroom computers running Windows and macOS systems, which enhanced faculty productivity and increased user satisfaction ratings by 20% in just one semester.

Carrier Remote

Software Developer Intern

May 2021 – May 2022

- Designed and implemented Python, SQL and C++ based data management systems to accurately track sales, returns, and inventory, enhancing stock management practices and reducing record discrepancies by 18%.
- Performed detailed **code reviews and systematic debugging** to optimize software algorithms, enhancing project efficiency and reliability, which contributed to annual operational cost savings of about \$110,000.

#### **TECHNICAL SKILLS**

Programming Languages: Python, C++, Java, JavaScript, Typescript, HTML, Go, CSS, C, C#, Swift Frameworks & Libraries: React, Next.js, Bootstrap, Angular, Flask, .Net, PyTorch, NumPy, Tailwind CSS, TensorFlow Tools, Databases, and Software: MongoDB, MySQL, Linux, Ubuntu, NOSQL, Docker, Git, AWS, Figma, Oracle, VirtualBox PROJECTS

## FocusTime AI | MediaPipe ML, TensorFlow, Flask, React

• An **Al-powered** web app built with **React, Flask, and PostgreSQL**. Integrated MediaPipe Holistic to extract **471** key points and used **TensorFlow for real-time gesture analysis**, detecting and addressing procrastination during study sessions.

## ResQ | Python, NodeJS, ExpressJS, MongoDB, Flutter, Google Maps API

Developed a disaster management app for efficient collaboration among rescue agencies, utilizing Python, Node.js,
Flutter, and Google Maps API for real-time location tracking, reducing rescue response times by 30%.

#### Operating System Kernel | C++, Linux, Ubuntu, C, Python, ASM x86\_64

Built an operating system kernel to implement memory management for virtual-to-physical address translation in Linux.
Capable of running ELF user programs on multicores and navigating multi-level page tables and swap operations.

## Chess Arena | C++, Node.js, React, CSS, HTML

• Developed a **full-stack web-based chess application**, **utilizing React** for dynamic frontend interactions and **Node.js and C++** for robust backend game logic. Deployed and managed the application through Vercel achieving 99.8% uptime.

#### **CERTIFICATES AND RELEVANT EXPERIENCE**

Machine Learning Specialization | Stanford University | Coursera Meta Full Stack Developer Professional | Meta | Coursera Lead Software Developer | EPICS Program | ASU x OpenAI