SARVESH SIRAS

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EDUCATION

Carnegie Mellon University, Pittsburgh, PA Expected Graduation: Aug 2025
Master of Information Systems Management
College of Engineering Pune (COEP), Pune, India
Bachelor of Technology, Information Technology (GPA: 3.61) 2017 - 2021

PROFESSIONAL EXPERIENCE

Software Engineer II, Mastercard July 2021 - July 2024

- Designed and developed highly scalable, secure, fault-tolerant micro-services capable of handling **1500** transactions per second using Java, Spring boot, Kafka, and SQL
- Played a vital role in the migration of Monolithic applications to Micro-services architecture which had better performance and scalability
- Utilized tools like Splunk and Dynatrace to analyze the performance of critical features, identifying and resolving bottlenecks to enhance overall system efficiency **threefold**
- Collaborated with stakeholders, and engineers to define project requirements, plan Agile sprints, and deliver high-quality software on time; participated in code reviews and provided constructive feedback

Summer Intern, Mastercard May 2020 - June 2020

- Collaborated with the Operations and Technology team to develop an e-commerce REST application using technologies like Spring boot, Java, React, and H2 for in-house enterprise applications
- Developed a mocking framework using Wiremock API to enable Rapid Application Development that reduced development time by **50%**

RESEARCH AND PROJECTS

Digitization of Invoices

- Employed Computer Vision techniques to digitize paper-based invoices into excel sheets with **86%** accuracy
- Trained Convolutional Neural Network models to accurately map the invoice data and devised image processing techniques to detect table and process text, respectively
- Published the project's findings in a research paper titled **A Deep Learning Approach for Digitization of Invoices** in the IEEE journal

Heap Manager

- Engineered a series of C functions, including malloc, calloc, realloc, and free, for efficient system heap memory management
- Implemented a hybrid memory allocator that combines the buddy system and free-list approach to optimize heap allocation and management

SKILLS AND CERTIFICATIONS

Programming Languages: C, C++, Python, Java, SQL, HTML, CSS, JavaScript, PHP
Technologies and Frameworks: Data Structures, Machine Learning, RDBMS, Spring Boot, Git
Certifications: IBM Machine Learning Professional Certificate, Specialization in Python by University of Michigan, Deep Learning and Neural Networks (Coursera)

LEADERSHIP AND VOLUNTEERING

Pro Bono Consultant, Bal Utsav
Head, Bhau's Innovation and Entrepreneurship Cell