Pooja Kulkarni

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EDUCATION

Ira A. Fulton Schools of Engineering, Arizona State University

Aug 2021 - May 2023

Master's of Science in Computer Science (GPA 3.3/4)

Dwarkadas J. Sanghvi College of Engineering (University of Mumbai)

Bachelor of Engineering in Computer Engineering (GPA 8.7/10)

Aug 2014 - May 2018

TECHNICAL SKILLS

Programming languages: Java, Python, Golang, C/C++, Javascript, Typescript, Bash, Perl, SQL

Tools/frameworks: Spring MVC, Spring Boot, Hibernate, JDBC, Gradle, Maven, Git, Jenkins, Apache Airflow, Swagger, Grafana

Data management systems: PostgreSQL, MySQL, DB2, H2, Sybase, MongoDB, AWS AuroraDB

Web development: HTML, CSS, Bootstrap, Angular, React, Next.js, Thymeleaf, NodeJS, ExpressJS, GraphQL

Cloud technologies: Docker, Kubernetes, AWS EC2, AWS S3, Cloudflare

Other applications/technologies: IBM MQ, Linux/Unix, REST APIs, SOAP services, Docker, XML, JSON, XSLT, Jira, Confluence

ASSISTANTSHIPS

Security Engineering for Future Computing (SEFCOM) lab, Arizona State University

Feh 2022 - Present

Graduate Services Assistant (GSA)

- Working with Dr. Ruoyu (Fish) Wang to add support for AVX assembly instructions to decompilers using C and Python

PROFESSIONAL EXPERIENCE

Salesforce May 2022 - Aug 2022

Software Engineer (Security) Intern

- Built an Apache Airflow Python DAG that extracted ~2.5 million vulnerabilities present in Salesforce's perimeter IP networks
- Persisted these vulnerabilities in AWS AuroraDB and exposed them for remediation via backend APIs using Golang and Swagger
- Went above and beyond by building APIs to disclose vulnerabilities' insights and built Grafana dashboards for extraction metrics

Digital Innovation Group, Arizona State University

Aug 2021 - Feb 2022

Software Developer (Full-stack), Student Worker IV

- Developed tree-based Javascript algorithms to represent knowledge using network visualizations in CytoscapeJS
- Built REST APIs, allowing users to manage networks and their collections using Java, Maven, Spring MVC, MongoDB and Neo4J
- Improved user experience by enhancing front-end features with HTML, Thymeleaf, CSS, Javascript and Bootstrap

Morgan Stanley

Manager (Software Engineer)

Jan 2021 - June 2021

- Developed a high-volume trading component using Java, Gradle, Spring Boot, Hibernate, DB2, Python, XML
- Improved performance at peak market hours by ~80% using caching mechanisms and dynamic message queues

Senior Associate (Software Engineer)

Jan 2020 - Jan 2021

- Developed a highly time-sensitive component to raise trading related exceptions, using Java, Spring Boot, JDBC, DB2
- Performed extensive unit testing, integration testing using H2 DB and performance testing using JProfiler

Associate (Software Engineer)

Jan 2019 - Jan 2020

- Decommissioned a legacy Java component and received department-wide recognition for 'Taking Ownership'
- Helped automate operations and developer tasks by building tools in Python, Perl and Bash

Technology Analyst

- Attended the 4-month long Technology Analyst Program (TAP) training conducted annually by Morgan Stanley.

Mindshift Applications and Solutions Pvt. Ltd.

Jan 2017 - April 2017

Aug 2018 - Jan 2019

Backend development intern

- Wrote complex SQL queries for developing 100+ REST endpoints using the Codelgniter PHP framework

PROJECTS

<u>CustomVM</u> (Academic) – Developed a Virtual Machine with custom registers and assembly instructions in C++ as a binary protection mechanism <u>Poojakulkarni.dev</u> - Developing a website to highlight my career, ideas and personal interests using React, Typescript, Material UI, Next.js <u>VaxAlert</u> - Built a Discord app to notify about COVID-19 vaccine slots using Python, Typescript, OpenAPIs by Indian Government, with ~1200 users

LEADERSHIP AND VOLUNTEERING ACTIVITIES

- Appointed as relationship manager at Morgan Stanley and successfully organized 2 campus hiring drives for my undergrad institute
- Taught Scratch programming language to underprivileged students as a part of the PiJAM foundation, India