Chaitra Boggaram

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Education

Santa Clara University

Jun 2024

Master of Science in Computer Engineering

GPA: 3.74

<u>Relevant Coursework</u>: Object-Oriented Design, Distributed Systems, Cloud Computing, Software Engineering

Bangalore University May 2016

Bachelor of Computer Applications GPA: 3.55

Relevant Coursework: Database Management, Computer Networks, Data Structures and Algorithms, Web Development

Professional Experience

Software Engineer, NXP Semiconductors - Bangalore, India

Jun 2020 - Jun 2022

- Created microservices with Java Spring Boot and deployed it onto AWS Elastic Kubernetes cluster, improved 30% in availability with ~99.95% uptime, introduced auto scaling, cost-effective resource utilization
- Developed an email click tracking system using Amazon SES, AWS API Gateway, Lambda functions, S3 storage to capture and analyze click events, enabled data-driven insights for phishing campaign user engagement
- Collaborated with cross-functional agile teams to build CI/CD pipelines via AWS Code Pipeline to automate testing and deployment, resulted in 20% reduction in release cycle time
- Incorporated AWS CloudWatch for real-time monitoring with AWS Identity and Access Management for enhanced security, compliance for proactive alerting which achieved 25% reduction in security vulnerabilities

Application Engineer, Tata Consultancy Services - Bangalore, India

Dec 2016 - May 2020

- Developed Python scripts to invoke REST API for Splunk search queries to identify and block malicious URLs across
 multiple systems, reducing ~100 security threats per week and enabling real-time threat protection
- Built DAX (SQL) queries with Power BI to generate interactive dashboards to provide real-time insights about inactive systems in Microsoft Defender, adopted by 20-member security team led to 10% increase in security compliance
- Implemented email notification system through Power Automate to alert users of identified vulnerabilities on remote machines with specified clear guidance on necessary actions to resolve, resulted in 80% reduction of security threats

Educational Experience

Graduate Teaching Assistant, Santa Clara University - Santa Clara, California

Jan 2023 - Present

 Automated grading process with Python scripts to download and analyze code from Git repositories, integrated Moss plagiarism detector across 200+ student submissions, ensuring academic integrity

Projects

Network-based Blockchain

Apr 2023 - Jun 2023

• Prototyped research project to improve blockchain by implementing Proof of Work on SmartNICs using multi-threading in C programming to enhance security and performance, targeted 5% increase in transaction throughput

Plagiarism Detector for ChatGPT

Jan 2023 - Mar 2023

- Led team of 3 to create a Flask application using Python, HTML, CSS for plagiarism detection, incorporating Machine Learning modules for accuracy, and invoked ChatGPT API completion for data comparison with 70% accuracy
- Published research paper at 8th International Conference on Computer and Information Science and Technology

Hack 4 Humanity - GiveForGood

Feb 2023 - Feb 2023

 Designed full-stack application with ReactJS and Flask to connect food recipients with local donors and charities, integrated Google Auth for user authentication, Google Maps API for location pinpointing, stored data using MySQL

ReferUp Sep 2022 - Dec 2022

• Built referral website for SCU students and alumni with React.js, Django, Python, employing OAuth 2.0 for authentication, deployed on AWS EC2, AWS RDS to manage user data, AWS SES to send email communication

Skills

Languages & Application Development: Python, Java, C, C++, JavaScript, Flask, Django, React.js, Spring, Shell script Cloud & Virtualization: Amazon Web Services, Microsoft Azure, Docker, Kubernetes, DevOps Other Tools: Terraform, CloudFormation, Splunk, Agile, SDLC, Jira, Git, ServiceNow, MySQL, Linux, CI/CD, MongoDB