Chaitra Boggaram

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Education

Santa Clara University   Jun 2024
Master of Science in Computer Engineering   GPA: 3.8
Relevant Coursework: Object-Oriented Design, Distributed Systems, Cloud Computing, Software Engineering

Bangalore University   May 2016
Bachelor of Computer Applications   GPA: 3.6
Relevant Coursework: Database Management, Computer Networks, Data Structures and Algorithms, Web Development

Professional Experience

Software Developer, Frugal Innovation Hub   Jan 2024 – Present
- Optimized deployment process for a Flutter application by creating Docker containers, authoring Dockerfiles, utilizing Docker Compose, and ensuring consistency across various development stages
- Improved functionality through JSON input processing and efficient gRPC communication in a microservices architecture, fostering seamless component communication and enhancing system flexibility

Software Engineer, NXP Semiconductors   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 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
- Designed CI/CD pipelines via AWS Code Pipeline to automate testing and deployment in cross-functional agile teams, resulted in 20% reduction in release cycle time
- Incorporated AWS CloudWatch for real-time monitoring with AWS Identity Access Management for enhanced security, compliance for proactive alerting which achieved 25% reduction in security vulnerabilities
- Ensured code quality and product reliability by creating and executing test plans, tracking bugs and issues with JIRA, and iteratively enhancing internal tool functionality to improve the user experience

Application Engineer, Tata Consultancy Services   Dec 2016 - May 2020
- Developed Python scripts to invoke REST API for Splunk search queries to identify and block malicious URLs across multiple systems, reduced ~100 security threats per week while enabling real-time threat protection
- Built unit testing using PyTest framework for Python scripts, ensuring robustness and reliability of security features
- Leveraged SQL queries for extracting and analyzing data in diverse security operations such as USB blocking, website/application allow-listing, and block-listing
- 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   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

Crypto News Notifier (Pub-Sub)   Sep 2023 - Nov 2023
- Developed real-time cryptocurrency Pub-Sub news notifier in Python, integrated both custom broker and Kafka options for efficient message passing, added CoinCap API for live prices, facilitated message generation through Postman

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, invoked ChatGPT API completion for data comparison with 70% accuracy
- Research paper accepted at 8th International Conference on Computer and Information Science and Technology

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

Programming Languages & Web Technologies: Python, Java, JavaScript, C, C++, Go, HTML5, CSS, JSON, Bootstrap 4.0
Frameworks: Flask, Django, React.js, Flutter, Spring
Cloud & Virtualization: Amazon Web Services, Microsoft Azure, Docker, Kubernetes, DevOps, CI/CD
Other Tools: Terraform, CloudFormation, Splunk, Agile, SDLC, Jira, Git, ServiceNow, Linux, Shell script, MySQL, MongoDB