Chaitra Boggaram

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Education

Santa Clara University   Expected Mar 2024
Master of Science in Computer Engineering   GPA: 3.74
Relevant Coursework: 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

Experience

Graduate Teaching Assistant, Santa Clara University - Santa Clara, CA   Jan 2023 - Present
- Automated grading process by creating Python scripts to download code from Git repositories, extracted C programs, and integrated moss plagiarism detector across ~200 students' submissions, enabling detection of code plagiarism and facilitating prompt action to maintain academic standards, increased code integrity

Software Engineer, NXP Semiconductors - Bangalore, India   Jun 2020 - Jun 2022
- Created microservices with Java Spring Boot and deployed it onto AWS Elastic Kubernetes cluster improving 30% in availability with ~99.95% uptime, introduced auto scaling, and cost-effective resource utilization
- Designed and implemented an email click tracking system where unique URLs were embedded in emails sent via Amazon SES, and utilized API Gateway with AWS Lambda function with S3 storage to log and analyze click events, facilitating data-driven insights into user engagement for phishing campaign
- Collaborated with cross-functional agile teams to build CI/CD pipelines via AWS Code Pipeline to automate testing and deployment, resulting in 20% reduction in release cycle time
- Incorporated AWS CloudWatch for real-time monitoring and AWS Identity and Access Management for enhanced security and compliance for proactive alerting and 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 user experience

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
- Integrated SQL queries with Power BI to create interactive dashboards to provide real-time insights about inactive systems in Microsoft Defender, widely adopted by 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 and specified clear guidance on necessary actions to resolve, resulting in 80% reduction in security threats

Projects

COT - Plagiarism Detector for ChatGPT   Jan 2023 - Mar 2023
- Led a team and designed Flask application via Python, HTML, and CSS to provide intuitive user interface for plagiarism detection, incorporating Machine Learning processing techniques through sklearn's TfidfVectorizer and cosine_similarity modules for accuracy, and invoked ChatGPT API completion for data comparison with 70% accuracy

ReferUp   Sep 2022 - Dec 2022
- Implemented referral website for students and alumni of SCU using React.js, Django, Python, and JavaScript for designing website, utilizing OAuth 2.0 for user authentication, and deploying website on AWS EC2, maintained user database on AWS RDS and automated email communication to referrers with AWS SES

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, Jira, Git, ServiceNow, MySQL, Linux, CI/CD, MongoDB