

Chaitra Boggaram

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Education

Master of Science in Computer Science and Engineering Jun 2024
Santa Clara University GPA: 3.8

Coursework: Distributed Systems, Cloud Computing, Artificial Intelligence, Object-Oriented Design, Software Engineering, Solutions Architecture and Cloud
Graduate Teaching Assistant: Computer Networks (Winter 2023 - Spring 2024)

Bachelor of Computer Applications May 2016
Bangalore University GPA: 3.6

Coursework: Database Management, Computer Networks, Data Structures and Algorithms, Web Development, Operating Systems, Computer Architecture

Professional Experience

Cloud Engineer, Equation to Success Jan 2024 - Present

- Building Node.js web application, containerized with Docker, and deploying and managing autoscaling using AWS Kubernetes Service in facilitating communication between students and teachers for issue reporting
- Implemented S3 for file storage with presigned URLs for secure file access in the same web application
- Introduced AWS IAM for granular access controls and policies for over 500 users, reducing unauthorized access incidents by 30%
- Crafting design documents involved meticulously creating both high-level and low-level system architecture diagrams using Draw.io and Figma

Software Engineer (Cloud), Tata Consultancy Services Jun 2020 - Jun 2022

- Led Java Spring Boot microservices development on Docker containers, deployed on AWS EKS, achieving 30% increase in application availability with ~99.95% uptime via auto-scaling and cost-effective resource usage
- Mentored 2 interns to implement an email click tracking system with Amazon SES, API Gateway, AWS Lambda functions, S3 storage, and Redis cache recovery, resulting in 25% improvement in analyzing phishing campaign engagement
- Created CI/CD pipelines with AWS Code Pipeline, managed agile development with JIRA in 5 cross-functional teams, and utilized Git for version control and code reviews
- Designed and implemented AWS Glue and Athena data pipeline for real-time supply chain analytics, achieving a 60% reduction in processing times and 40% cost savings with serverless architecture, enabling proactive inventory management and optimized delivery routes
- Built C++ tool for parsing log files, resulting in 35% reduction in time for system administrators and support teams on log analysis tasks
- Orchestrated Golang microservices on Kubernetes, reducing system response times by 15% and enhancing supply chain management efficiency without disrupting operations, thereby supporting business growth
- Implemented Spring Framework MVC microservice integrated with Elasticsearch, enhancing job status tracking by 75% in ETL pipeline

Junior Software Engineer, Tata Consultancy Services Dec 2016 - May 2020

- Enhanced data transfer efficiency by 20% and reduced API response times by 15% by transitioning organization hierarchy view system to GraphQL
- Developed Python scripts using Splunk's REST API to block approximately 100 security threats weekly, saving 12 hours of manual effort each week
- Created PyTest unit testing for Python scripts, ensuring 20% increase in the reliability of security features
- Implemented full-stack TCS app using HTML5, CSS, React.js, and JavaScript for the frontend, Node.js for the backend, and MySQL for the database, achieving 25% increase in data processing efficiency
- Achieved 20% efficiency gain in semiconductor testing by optimizing Postgres and Cassandra databases with query batching and materialized views to reduce latency, and improving PostgreSQL with key column indexing for real-time data analysis

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 craft GenAI-powered Flask application using Python, incorporating PyTorch and scikit-learn, NTLK 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

Certifications

- AWS Solutions Architect Associate Certification (In-Progress) - Amazon Web Services
- Python Fundamentals - DataCamp, Credential - 313036

Skills

Programming Languages & Web Technologies: Python, Java, HTML5, CSS, Dart, C++, JavaScript, React.js, Node.js, Go, SQL, JSON, Bootstrap 4.0

Frameworks: Flutter, Firebase, Java Spring Boot, FastAPI, Huey, Flask, PyTorch, gRPC, Spring, Angular, Apache Kafka, Elasticsearch

Cloud & Virtualization: Amazon Web Services, Microsoft Azure, Docker, Kubernetes, DevOps, CI/CD, Minikube, CloudFormation, Terraform

Other Tools: Splunk, Agile, SDLC, Jira, Git, ServiceNow, Linux, Shell script, GraphQL, Postman, MySQL, MongoDB, DynamoDB, Firebase