SAI SREENIVAS REDDY KARRA

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EDUCATION AND CERTIFICATIONS

AWS Certified Cloud Developer Associate, Amazon **Jun 2024**

Saint Louis University, Missouri, USA **Jan 2022 - Dec 2023**
Master of Science in Computer Science **GPA: 3.97/4.0**

Course Work: Machine Learning, AWS, Mobile Application Development, Advance Storage technologies.

SKILLS AND TECHNOLOGY

- **Languages:** Java, Python, C#, SQL/PL SQL, HTML5, CSS3, SASS, JavaScript (ES6+), XML, JSON, PHP.
- **Libraries/Frameworks:** J2EE, .Net, Spring, Hibernate, REST, SOAP, HotChocolate, GraphQL, React.js, Redux, Node.js.
- **Cloud:** AWS (ECS, ECR, Lambda, S3, VPC, Secrets Manager, CloudWatch, EventBridge, Cognito), Azure (Devops).
- **Databases:** SQL (MSSQL, MySQL, PostgreSQL, Oracle), NoSQL (MongoDB, AWS DocumentDB, AWS DynamoDB).
- **Software:** Terraform, Docker, Maven, Git, GitHub, Agile, Jira, DevOps, Lucidchart.

PROFESSIONAL EXPERIENCE

Pacific Life, California, USA - Software Engineer **Nov 2024 - Present**

- Architected and deployed event-driven, serverless data pipelines using AWS EventBridge, Lambda, and Batch to automate ingestion from on-prem SQL databases into AWS RDS Aurora MySQL and AWS DocumentDB, improving data availability and reliability for downstream applications.
- Developed federated GraphQL APIs with .NET (C#), HotChocolate, and Apollo Router, integrating multiple subgraphs under a unified supergraph gateway on AWS ECS (Fargate) for high scalability and low-latency query execution.
- Built and maintained RESTful and GraphQL APIs using Python and .NET Core, integrating secure authentication and authorization with AWS Cognito, Secrets Manager, and OAuth2 for enterprise-grade access control.
- Implemented Infrastructure as Code (IaC) using Terraform to provision and manage compute, storage, and network resources across AWS environments, ensuring consistency, scalability, and version-controlled infrastructure.
- Automated CI/CD pipelines with Azure DevOps for building, testing, and deploying APIs and infrastructure on AWS, reducing manual effort and deployment time by over 70%.
- Integrated observability and monitoring with AWS CloudWatch and EventBridge to capture API performance metrics, application logs, and error tracking, enabling proactive incident response and improved reliability.
- Optimized database performance across AWS RDS, DynamoDB, and DocumentDB by designing efficient schemas, improving query patterns, and automating data synchronization from on-prem systems.
- Collaborated cross-functionally with DevOps and data engineering teams to design and deliver scalable backend microservices architectures, improving overall system throughput, maintainability, and deployment efficiency.

IMetaverse, USA - Full Stack Developer **Jan 2024 - Oct 2024**

- Developed and maintained Java Spring Boot applications and REST/SOAP APIs, improving system performance and reducing response times by 25%.
- Built dynamic React.js + Redux frontends, enhancing user experience and reducing page load times by 30%.
- Deployed and managed containerized applications using Docker, AWS ECS, and ECR, streamlining CI/CD workflows and reducing deployment errors.
- Designed cloud-native solutions leveraging AWS Lambda, S3, VPC, CloudWatch, EventBridge, and Cognito, ensuring high availability and secure authentication.
- Optimized SQL (MSSQL, MySQL, PostgreSQL) and NoSQL (MongoDB, DynamoDB) databases, improving query performance and data retrieval efficiency.
- Implemented GraphQL endpoints and automation scripts using Node.js, enhancing API efficiency and operational productivity by 20%.
- Led agile development practices using Jira, maintained infrastructure-as-code with Terraform, and ensured code quality via Git/GitHub, improving team velocity and release stability.

Wipro, India - Full Stack Developer **Sep 2020 - Dec 2021**

- Developed and deployed a microservices-based web application using Java, Spring Boot, and React.js, improving system scalability by 40% and reducing page load times by 30%, while contributing to a 15% increase in feature deployment efficiency.
- Implemented RESTful APIs and web services to enable seamless integration between frontend and backend systems, enhancing performance and user experience.
- Debugged and optimized application issues using Eclipse, Git, and browser developer tools, cutting bug resolution time by 30% and improving overall system stability.
- Designed and developed user interfaces and wireframes using React JS and Figma (components, auto-layout, interactive prototyping), creating scalable, reusable design systems that improved design efficiency and frontend development speed, and increased user satisfaction by 20%.
- Collaborated cross-functionally within Agile teams using Jira, ensuring timely delivery, effective communication, and alignment between engineering, design, and QA teams.

PROJECTS

Portfolio Website (SPA) - React.js, HTML5, CSS3, Git, GitHub Actions

- Designed and developed a responsive personal portfolio website using React.js to showcase professional experience, skills, and projects.
- Structured the site into four interactive sections — Home, About, Projects, and Resume — for seamless navigation and an engaging user experience.
- Utilized HTML5 and CSS3 for clean, modern UI design and component styling, ensuring mobile responsiveness and cross-browser compatibility.
- Implemented version control and collaborative workflow using Git and GitHub repositories. Automated deployment using GitHub Actions pipelines, enabling continuous integration and delivery directly to GitHub Pages.

Handwritten Digit Classification Web App - Python, Flask, React, scikit-learn, Keras

- Built and trained multiple ML models, including deep neural networks and decision trees, to classify handwritten digits with high accuracy using the MNIST dataset.
- Engineered a Flask-based Python backend for model inference and integrated it with a React.js frontend for real-time user interaction and predictions.
- Utilized NumPy, Pandas, scikit-learn, and Keras for data preprocessing, feature engineering, and model optimization, achieving robust performance and scalability.
- Serialized models with Pickle and deployed the full-stack app using REST APIs, demonstrating end-to-end machine learning workflow from training to deployment.