
Summary

Software Developer with impeccable Applications development skills (Frontend & Backend, DevOps), management skills and mainly **Problem-Solving Skills**. I can be called as a Team player that pushes the team to do its best in terms of using latest and fastest technologies to develop the best user experience and deliver on time with automated tools and project management tools like Jira with strong Object-Oriented Programming (OOP) skills to design and implement robust, scalable, and maintainable software solutions.

Employment**Software Engineer II****Full Stack applications/DevOps development****BDIPlus****Jan 2025 – Present**

- Engineered large-scale data transformation pipelines in Python, leveraging multithreading and queuing to achieve ~4 times faster throughput — scaling processing from ~500 to nearly 2,000 records per minute without additional resources.
- Integrated machine learning models for Retrieval-Augmented Generation (RAG) via the MCP protocol, enabling advanced AI-powered data enrichment and contextual insights.
- Designed and deployed RESTful APIs using Python Flask to serve AI models bases responses and backend data services efficiently.
- Automated infrastructure provisioning and deployment of Docker containers and VMs on Proxmox, reducing CI/CD build times by ~70%.
- Implemented backend solutions supporting data governance, analytics, and AI integration in production environments.
- Additionally, developed and launched the company's Next.js static website, ensuring a modern and performant external presence.

Software Engineer**Full Stack applications development**
2024**American Unit, Inc.****May 2023 – Dec**

- Reduce Call center volume by 80% by simplifying App user interface and improving functionality.
- Develop Google Gemini based ChatBot using LangChain (tool-calling, LLM agents) for easier customer support.
- Improve network usage of application using IBM Object Storage to have different route for static content.
- Implement Yolo Machine learning model on Mobile application for object detection and automatic Tagging.

Senior Software Engineer**Full Stack applications development & Project Management CES Information Technologies.****Jun 2019 – Jan 2022**

- Implement Redux toolkit for better code readability and management.
- Use Percy/BrowserStack for visual regression testing.
- Automate iOS & Android releases on CircleCI and implement automated changelog generation for easier Product release management.
- Migrate codebase to Typescript for better maintainability.
- Build a notification management system using Firebase, NodeJS and deploy on Azure AKS (Microservice).
- Improve application leaderboard for being real time and efficient using redis data structure ZSETs.

Software Engineer**Frontend Development****Gyanmatrix Technologies.****Jan 2019 – Jun 2019**

- Improve code quality extensively to reduce prop drilling using Redux and Context.
- Develop POC around RabbitMQ and Kafka for high performance backend system and decentralization of the backend.
- Improve Page load times to keep under 300ms using React Lazy Loading to asynchronously load components.
- Implement complex CSS for shadow scrolling effect on list.

Software Engineer (Part Time)**Backend Development****Saarthi Tech Pro.****Feb 2021 – Dec 2021**

- Develop Automated test systems using Jest & Mocha to improve time-to-market.
- Improve Build costs using spot instances on Jenkins by 80% and improve speeds by 50% using bigger instances spot instances with reduced costs.
- Improve API response times to lock down below 500ms using extensive logging and traceability metrics on Grafana, Prometheus.
- Manage development efforts using Atlassian Jira for better visibility and traceability.
- Breakdown monolith application to microservices saving backward compatibility with Kubernetes.
- Implement PGPool and Internal DNS routing for Master-Slave configuration of Postgres improving query speeds from almost 1000ms to under 200ms.

Education**Masters in Artificial Intelligence****Long Island University, NY****Jan 2022 - Jan 2024**

- Graduate Coursework: Algorithms & Data structures, Cloud Computing, Machine Learning, Computer Vision, Natural Language Processing, Distributed Processing.

Bachelor's in computer science**Alliance University, Bangalore****Aug 2015 - Jun 2019**

- Undergraduate Coursework: Algorithms & data structures, computer networks, storage area networks, Machine Learning, Classification, Regression.

Projects

- CNN based Skin Cancer classification Application using Pytorch, optimized training time using RAM for caching.
- ONNX model using Pytorch for running it on the Web Application on client side.
- Implement bigram model for study purposes using tensorflow.
- Develop Backend Rest API for image OCR and run it using docker for scalability.
- Distributed machine learning project using AWS EMR for training and prediction of the wine quality.
- Web Scraping for building dataset for a machine learning project.

Courses/Certifications

- Neural Networks: Zero to Hero by Andrej Karpathy - <https://karpathy.ai/zero-to-hero.html>
- The Complete React Developer Course (w/ Hooks and Redux) - Udemy - <https://www.udemy.com/user/andrewmead/>

Languages & Technologies

- Programming languages – Javascript, Python, Typescript, Java.
- Database systems – NoSql, Mysql, Postgres, AWS RDS, MongoDB
- Cloud technologies – Kafka, Amazon AWS suite, Docker, Kubernetes, GCP Cloud Technologies
- Machine Learning – CNN, Transformers, Pytorch, Tensorflow, Pandas, Matplotlib