Pawan Bhandarkar

Mountain View, CA
Email : pawan@bhandarkar.me
Mobile : +1(650)537-7341

Portfolio: https://bhandarkar.me
Github: https://github.com/BhandarkarPawan
Linkedin: https://www.linkedin.com/in/bhandarkar

Education

Carnegie Mellon University   Mountain View, CA
*Master of Science in Software Engineering; **GPA: 4.0/4.0***   *Dec 2023*
Courses : Cloud Computing, Foundations of Software Engineering, Software Verification & Testing, Data Science

NMAM Institute of Technology   Nitte, India
*Bachelor of Computer Science; **GPA: 9.8/10** (top 1%, Class of 2020)*   *Apr 2020*
Courses : Data Structures & Algorithms, Object Oriented Modelling & Design, Operating Systems, RDBMS

Skills

Languages	: Python, Go, Java, C++, TypeScript, C#, GraphQL
Tools	: Redis, Kafka, Docker, Linux, AWS, Terraform, ActiveMQ, gRPC, New Relic
Frameworks	: PostgreSQL, React, Redux, NodeJS, Express, MongoDB, Flask, Tensorflow
Soft Skills	: Communication (verbal and written), Leadership, Collaboration, Mentorship

Experience

TuneIn Radio   San Francisco, USA
Software Engineer Intern, Platform   *Jun 2023 - Aug 2023*
- Pioneered subscription-based APIs via WebSockets through Test-Driven Development on the GraphQL API gateway backed by microservices using gRPC communication in Go
- Expanded the C# (.Net core) monolith codebase with support for live streaming metadata for over 120,000 radio stations
- Deployed microservices with Infrastructure as Code using Terraform and Kubernetes and monitored them using New Relic
- Built data communication pipelines using Apache ActiveMQ and Redis Streams (AWS ElastiCache)
- Wrote comprehensive test suites and load-tested the microservice using NBomber to ensure production-readiness
- Collaborated with Product and Data Engineering teams to plan and prioritize related Jira tickets

Team AIBOD Inc.   Fukuoka City, Japan
Software Engineer 2   *Nov 2021 - Apr 2022*
- Led end-to-end development of a payment microservice with Python, Flask, and PostgreSQL with HTTPS/SSL for security
- Developed a component library with React, CSS, and TypeScript for an unmanned store
- Deployed applications using Docker and AWS (ECR + ECS) and configured CloudWatch for monitoring
- Engineered a search system using Python, SQL, GraphQL, and React for Kyushu Electric

Software Engineer 1   *Feb 2020 - Oct 2021*
- Created a Python script and a Tkinter-based GUI-tool for annotating and visualizing images, increasing data pre-processing rate from 20 to 200 images/hour and improving team productivity
- Integrated 30+ REST APIs leveraging API docs and Postman, resulting in enhanced app functionality
- Set up a Jenkins pipeline for CI/CD and supported DevOps with AWS (ECR, ECS, S3 and AWS Fargate)
- Reduced total API calls by 30% by implementing Redux for simplified state management on the frontend

Projects

Kanban Task Manager | *React, AWS, Docker, NodeJS, MongoDB*   *Jan 2023 - Present*
- Developed an accessible, responsive Kanban Task Manager using Client-Server architecture with dynamic theming and drag-and-drop UI. Deployed to AWS EC2 using Docker and ECR with a CI/CD pipeline using Github Actions. Handled security with HTTPS/SSL on the AWS Load Balancer.

Incident Response | *AWS, Docker, React, Socket.IO, MongoDB, Jenkins, Jira*   *Feb 2023 - May 2023*
- Developed a communication platform for citizens and first responders during emergencies using Express.js, Socket.IO, and Mongoose. Refactored codebase and managed development in a scrum-of-scrums setting. Deployed the app using Docker, Jenkins, and AWS.

Emergency Social Network | *HTML, CSS, TypeScript, NodeJS, MongoDB*   *Aug 2022 - Dec 2022*
- Built an emergency communication system for real-time SOS messaging during earthquakes with an MVC architecture. Utilized SCRUM and Kanban agile practices, object-oriented analysis (OOA) and test-driven development (TDD) in a fast-paced environment to create a user-friendly system with JSON-based RESTful APIs

Awards & Leadership

Graduate Teaching Assistant : Software Requirements & Interaction Design (CMU - Fall 2023)
Graduate Teaching Assistant : Foundations of Software Engineering (CMU - Spring 2023)
Student Leader : ECE Graduate Organization (CMU - Fall 2022)