Pawan Bhandarkar

Mountain View, CA Portfolio: bhandarkar.me Email: pawan@bhandarkar.me Github: bhandarkar.me/github Mobile: +1(650)537-7341Linkedin: bhandarkar.me/linkedin

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 Requirements & Interaction Design, Software Testing

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 : JavaScript (ECMAScript 6), TypeScript, Python, Java, C++, C#, Go, GraphQL

: Kafka, AWS, ActiveMQ, Azure, Docker, Redis, Terraform, Kubernetes, Linux, gRPC, New Relic

Frameworks: React, Flask, PostgreSQL, Flutter, Redux, NodeJS, Express, MongoDB : Communication (verbal and written), Leadership, Collaboration, Mentorship

Experience

TuneIn Radio

San Francisco, USA

Jun 2023 - Aug 2023

Software Engineer Intern, Platform • Spearheaded the development of subscription-based APIs using WebSockets, enhancing real-time data delivery for up to 7.5M monthly users. Utilized Test-Driven Development in Go to ensure a robust GraphQL API gateway

- Engineered high-throughput data communication pipelines using Apache ActiveMQ and Redis Streams, processing over 2 million messages per day, with latencies under 30 ms, on AWS ElastiCache
- Achieved 95% code coverage with test suites and load-tested for 100,000 concurrent requests to ensure production readiness
- Automated microservice deployment using Terraform and Kubernetes. Maintained 99.9% uptime with New Relic monitoring
- Expanded the C# (.NET Core) monolith codebase with support for live streaming metadata for over 120,000 radio stations
- Collaborated with Product Managers to translate business requirements into technical specifications

Team AIBOD Inc

Fukuoka City, Japan

Nov 2021 - Apr 2022

Software Engineer 2

- Created a React component library, reducing UI variants by 50% to enhance consistency in the POS for an unmanned store
- Engineered an information management system for serving up to 150,000 users daily, with React, Python, SQL and GraphQL
- Conducted A/B tests to understand user behavior, tailoring the information management system to better suit user needs
- Engaged in cross-functional meetings with PMs and designers to ensure alignment between user needs and development tasks
- Led the development of a payment microservice, handling 200 transactions per hour, with gRPC, Flask and PostgreSQL

Software Engineer 1

- Slashed total API calls by 80% by pioneering the use of Redux, contributing to a 20% improvement in app load times
- Integrated 30+ RESTful APIs leveraging Apiary and Postman, resulting in enhanced app functionality
- Set up a Jenkins CI/CD pipeline that automated 100+ weekly builds, while utilizing AWS services like ECR, ECS, S3, and AWS Fargate for seamless DevOps

Projects

Kanban Task Manager | React, EC2, ECR, Docker, NodeJS, MongoDB

Jan 2023 - Present

• Developed a responsive web app with pixel perfect user interfaces based on Figma designs. Used Client-Server architecture with dynamic theming and drag-and-drop UI, focusing on A11y, ARIA and Semantic HTML. 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 | React, CloudFront, Docker, Socket.IO, MongoDB, Jenkins

• Led the frontend development of a mobile-first communication platform for citizens and first responders during emergencies. Used Ant Design, Figma and Storybook for the UI, refactored the codebase and advised the team on best practices in UI development and accessibility. Deployed the app to S3 using Jenkins and CloudFront

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

Sakura Science Fellow: Received a fully-funded scholarship from the Japan Science and Technology Agency to participate in a research internship at Ritsukeikan University, Japan

Teaching Assistant: Demonstrated strong leadership and team collaboration skills as a Graduate Teaching Assistant for three courses: Foundations of Software Engineering, Software Requirements & Interaction Design and Introduction to Graduate Studies