Pawan Bhandarkar

Mountain View, CA
Email : panambub@andrew.cmu.edu
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*** — *Aug 2022 - Dec 2023*
Courses : Foundations of Software Engineering, Software Verification & Testing, HCI & UX, Data Science for Software Engineering

NMAM Institute of Technology — **Nitte, India**
Bachelor of Computer Science; ***GPA: 9.8/10*** *(top 1%, Class of 2020)* — *Jul 2016 - Apr 2020*
Courses : Data Structures & Algorithms, Object Oriented Modelling & Design, Software Architecture, DBMS

Skills

Languages : Python, Java, JavaScript, HTML, CSS, TypeScript, SQL, GraphQL, C++
Frameworks : React, Redux, NextJS, jQuery, Ajax, Bootstrap, Tailwind, NodeJS, Flask, PostgreSQL, Express, MongoDB
Tools : Figma, Storybook, Jenkins, Docker, AWS, Amazon S3, Postman, Git

Experience

Team AIBOD Inc. — Fukuoka City, Japan
Software Engineer II — *Nov 2021 - Apr 2022*

- Developed a component library with React, CSS and TypeScript for an unmanned store, enhancing accessibility through an intuitive interface, accelerating UI development and streamlining the overall development process.
- Reduced the number of API calls by 30% through the implementation of Redux, resulting in simplified state-management.
- Crafted a visually stunning Design System using Figma and Storybook, featuring a sleek and modern design aesthetic.
- Led the end-to-end development of a RESTful payment server leveraging Python, Flask, and PostgreSQL for CRUD operations, resulting in the expansion of customer base, contributing to ∼¥500K increase in annual revenue.
- Containerized and deployed applications using Docker, set up AWS Cloudwatch for remote monitoring of unmanned stores across 5 customer locations, ensuring smooth and efficient operations.

Software Engineer I — *Jul 2020 - Oct 2021*

- Transformed high-fidelity mockups into pixel-perfect, responsive implementations for seamless mobile and desktop experiences
- Streamlined 3 ongoing projects by implementing a Search System using SQL (PostgreSQL), GraphQL, and React, styled with TailwindCSS, resulting in faster and more efficient data retrieval.
- Introduced unit and integration tests with Jest which improved team efficiency and reliability with over 80% coverage.
- Created a Python script and a GUI-tool using Tkinter for annotating and visualizing images that improved the data pre-processing rate from 20 to 200 images/hour and enhanced team productivity.
- Set up a Jenkins pipeline for continuous integration and deployment as well as a Slackbot to take early action on failures. This helped reduce the build failure frequency by 50%

Machine Learning Intern — *Feb 2020 - Jun 2020*

- Applied Feature Engineering to improve the accuracy of a KNN-supervised classifier by 7%, resulting in more effective classification of products in an unmanned store.
- Used BERT and PyTorch to automate support request routing in an apartment intercom system by recognizing named entities. Integrated the trained model with the Express API Server to provide AI as a Service.
- Expertly resolved more than 20 bugs in the API server using NodeJS and TypeScript, resulting in improved stability and performance of the server, also contributed to ongoing full-stack applications.

Projects

Incident Response | ***React, TypeScript, MongoDB, Jenkins, Docker, Jira*** | Link — *Feb 2023 - Present*

- Built a mobile communication platform for citizens and first responders during emergency situations. Migrated the codebase from MaterialUI to AntDesign and led the frontend development efforts in a scrum-of-scrums environment. Deployed the app using Docker, Jenkins and AWS.

Emergency Social Network | ***HTML, CSS, TypeScript, NodeJS, MongoDB*** | Link — *Aug 2022 - Dec 2022*

- Built an emergency communication system for real-time SOS messaging during earthquakes. Utilized SCRUM and Kanban agile practices, object-oriented analysis (OOA), object-oriented programming (OOPS) concepts and test-driven development in a fast-paced environment to create a user-friendly system with JSON-based RESTful APIs.

Kanban Task Manager | ***React, NodeJS, Styled-Components, Figma*** | Link — *Jun 2022 - Dec 2022*

- Developed a highly accessible Kanban Task Manager using Client-Server architecture with React Hooks and Context API focussing on A11y, Semantic HTML, and ARIA labels, which ensured usability with screen readers such as Apple Voice-Over. Generated clear API documentation with API Blueprint and Postman.

Leadership

Graduate Teaching Assistant : Foundations of Software Engineering at Carnegie Mellon University.
Student Leader : ECE Graduate Organization at Carnegie Mellon University (Among 160 students).