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***   *December 2023*
Courses : Foundations of Software Engineering, Software Verification & Testing, HCI & User Experience

NMAM Institute of Technology   **Nitte, India**
Bachelor of Computer Science; ***GPA: 4.0/4.0***   *April 2020*
Courses : Data Structures & Algorithms, Object Oriented Modelling & Design, Software Architecture, DBMS

EXPERIENCE

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

- Developed a component library with React, Redux, and TypeScript for an unmanned store, including components for displaying real-time video feed and live (Pytorch/ResNet) classification results for products
- Streamlined 3 ongoing projects by implementing a Search System using SQL, GraphQL, and React, styled with TailwindCSS, resulting in faster and a more efficient data retrieval
- Led end-to-end development of a payment microservice with Python, Flask, and PostgreSQL, using Swagger for API design and implementing security (HTTPS/SSL), improving scalability and promoting reuse across 3 projects
- 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*

- Reduced total API calls by 30% by implementing Redux for simplified state management on the frontend
- Integrated 30+ REST APIs leveraging API docs and Postman, resulting in enhanced app functionality
- Transformed UI mockups into pixel-perfect, responsive implementations for seamless mobile and desktop experiences
- Set up a Jenkins pipeline for CI/CD and supported DevOps with AWS (ECR, ECS, S3 and AWS Fargate)
- Created a Python script and a GUI-tool using Tkinter for annotating and visualizing images, increasing data pre-processing rate from 20 to 200 images/hour and enhancing team productivity

AI Engineer Intern   *Feb 2020 - Jun 2020*

- Applied Feature Engineering, boosting KNN-supervised classifier accuracy by 7%, resulting in effective classification of products from a video stream in an unmanned store
- Led research efforts for Human-Object Interaction (HOI) detection using PyTorch to identify items left behind at train stations from live video and integrated it with the Express.js API Server to provide AI as a Service
- Resolved more than 20 bugs in the Node.js (TypeScript) API server, resulting in increased stability and server performance, also contributed to ongoing full-stack applications

PROJECTS

Emergency Social Network | *HTML, CSS, TypeScript, Node.js, MongoDB* | Link   *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

Kanban Task Manager | *React, Node.js, Styled-Components, Figma* | Link   *Jun 2022 - Dec 2022*

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

SKILLS

Languages   : JavaScript, HTML5, CSS3, TypeScript, SQL, GraphQL, Python, Java, C++
Frameworks : React, Redux, NextJS, jQuery, Zustand, Tailwind, Node.js, Flask, PostgreSQL, Express.js, MongoDB
Tools   : Figma, Swagger, Storybook, Jenkins, Docker, AWS, Postman, Git

LEADERSHIP

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