

# Pawan Bhandarkar

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## Education

### Carnegie Mellon University

*Master of Science in Software Engineering; GPA: 4.0/4.0*

**Courses** : Cloud Computing, Foundations of Software Engineering, Software Verification & Testing, Data Science

Mountain View, CA

*Aug 2022 - Dec 2023*

### NMAM Institute of Technology

*Bachelor of Computer Science; GPA: 9.8/10 (top 1%, Class of 2020)*

**Courses** : Data Structures & Algorithms, Object Oriented Modelling & Design, Operating Systems, RDBMS

Nitte, India

*Jul 2016 - Apr 2020*

## Skills

**Languages** : Go, C#, GraphQL, Javascript, Java, Python, SQL, NoSQL

**Tools** : GRPC, Kafka, Message Queues, Redis, Docker, WebSockets, AWS, New Relic, Jenkins

**Frameworks** : React, Redux, NodeJS, Express, MongoDB, Flask, PostgreSQL

**Soft Skills** : Communication (verbal and written), Leadership, Collaboration, Mentorship

## Experience

### TuneIn Radio

*Software Engineer Intern, Platform*

San Francisco, USA

*Jun 2023 - Present*

- Contributed to next generation platform by adding support for subscriptions via **WebSockets** 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 to staging via CI/CD with **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.

*Software Engineer 2*

Fukuoka City, Japan

*Nov 2021 - Apr 2022*

- Developed a comprehensive component library with **React** and **Typescript** for an unmanned store
- Led the end-to-end development of a **REST API** payment server leveraging **Python**, **Flask**, and **PostgreSQL**
- Containerized and deployed applications using **Docker**, and set up **AWS Cloudwatch** for remote monitoring
- Mentored interns** from IIT Hyderabad, promoting technical and professional growth in a collaborative environment.

### Software Engineer 1

*Feb 2020 - Oct 2021*

- Created a **Python script** and a GUI-tool using **Tkinter** for annotating and visualizing images, increasing the data pre-processing rate from 20 to 200 images/hour and enhancing team productivity.
- Designed and implemented a Search System using **GraphQL** with **Apollo** and **Ariadne**, streamlining 3 ongoing projects.
- Set up a **Jenkins** pipeline for CI/CD and supported DevOps with **AWS** (ECR, ECS, S3 and AWS Fargate)
- Introduced **unit and integration tests** with **Jest** which improved team efficiency and reliability with over 80% coverage.

## Projects

### Emergency Social Network | TypeScript, NodeJS, MongoDB, HTML, CSS

*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 (OOP) concepts** and test-driven development in a fast-paced environment to create a highly user-friendly system with **JSON-based RESTful APIs**.

### Re:use | React, Typescript, NodeJS, MongoDB, Figma

*Aug 2022 - Dec 2022*

- Led the development of the **MVP** for a Resource Management application in the donation industry by generating style guides in **Figma**, and converting user requirements into working software using the **MERN Stack**.

### Refriendo | TypeScript, React, CSS, Figma

*Oct 2021 - Jul 2022*

- Implemented a cross-platform Event Management Application for both **Android** and **iOS** using **React** and **Ionic Capacitor**. Designed and iteratively improved the user interface through high-fidelity **Figma** prototypes and think-aloud usability testing surveys, resulting in a clean, visually appealing design aesthetic.

## 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)