

Ashutosh Kumbhar

+1 623-698-7433 | akumbha3@asu.edu | <https://ashutosh.us> | github.com/2727-ask | Tempe, Arizona, USA

EXPERIENCE

Software Developer

August 2023 – August 2024

Western Union

Full-Time

- Contributed to developing and maintaining the Western Union POS retail application, ensuring seamless functionality and performance.
- Developed **Point Of Sale Development Utility**, which boosted developer **efficiency by 70%**.
- Collaborated in the migration of **WUPOS** from Apache Tapestry to Angular 14, resulting in a **15% increase in revenue**, significant improvements in both agent and user experience, and **expanded market share** through modernized front-end architecture.
- Executed a Test-Driven Development (TDD) strategy within teams using the **Playwright** framework.

Software Engineer

June 2022 – February 2023

MindsClik Digital Solutions

Part-Time

- Developed a white-labeled e-commerce solution, which evolved into a **core product** offering.
- Introduced and integrated **Flutter** as a new application stack, resulting in enhanced performance and increased development productivity.

Full-Stack Developer

January 2021 – June 2022

LinkCode Technologies

Part-Time

- Designed the architecture for the LinkCode LMS, driving the organization's digital transformation and resulting in a **35% increase in revenue**.
- Managed a team of **10 developers**, overseeing the collective development and implementation of the software.
- Migrated the entire infrastructure to a server-less architecture using AWS **Lambda**, enhancing scalability and cost-efficiency.
- Implemented **Web-RTC** for video conferencing, improving real-time communication capabilities.
- Established CI/CD pipelines with Jenkins, optimizing development workflows and deployment processes.

Full-Stack Development Intern

April 2020 – September 2020

Aitheon

Internship

- Created a **no-code** application development platform using Visual Studio Web, Node.js, Node-RED, and Vue.js, enabling users to create applications without traditional coding.
- Development of **IoT** applications leveraging Robot Operating Systems, NVIDIA Jetson Nano, and Code-Studio.

PROJECTS

Online Compiler Web IDE | *Docker, Kubernetes, Redis, Node.js, Angular, Nginx*

- Developed a cloud-based platform supporting over 10+ programming languages, enabling software developers and students to perform heavy computation without local hardware.
- Optimized resource management by deploying an in-house bare-metal server using QEMU and Ngrok, reducing infrastructure costs and increasing system reliability.
- Collaborated with a team to design a highly scalable architecture leveraging containerization technologies like Docker and Kubernetes.
- Improved user experience and streamlined development by implementing CI/CD pipelines and integrating real-time collaboration features.

Diagnostic Center Resource Management System | *Vue.js, Electron.js, Firebase, GCP*

- Designed and implemented a web application to manage resources and patient data, boosting productivity by **80%** for the Unique Diagnostic Center.
- Integrated Firebase for real-time data synchronization and GCP for cloud-based resource scaling, improving performance and availability.
- Built user-friendly frontend using Vue.js, focusing on responsive design and cross-platform compatibility via Electron.js.
- Collaborated in Agile sprints to deliver regular updates and features, ensuring continuous improvement and meeting user requirements.

Hospital Management System | *Django, AWS, REST, PostgreSQL*

- Engineered an emergency resource management system to track real-time availability of hospital beds, vaccines, and ventilators during the COVID-19 pandemic.
- Implemented RESTful APIs using Django, providing efficient data handling and integration with AWS EC2 for scalable cloud hosting.
- Collaborated with healthcare professionals to design intuitive dashboards, making critical information accessible to non-technical users.
- Ensured data integrity and security by incorporating PostgreSQL for robust database management and encryption.

JSON to TypeScript Converter | *JavaScript, HTML5*

- Developed an algorithm from scratch to detect and convert nested JSON objects into corresponding TypeScript interfaces, simplifying the workflow for developers.
- Built the application using Vanilla JavaScript for high compatibility across different browsers without relying on external libraries.
- Enhanced user experience by incorporating real-time validation and error checking, reducing manual effort and preventing conversion errors.
- Collaborated with users to gather feedback and iteratively improve the user interface, delivering a more intuitive tool.

Crypto Tracker | *Flutter, FlutterFlow, Dart, Firebase, Cloud Firestore*

- Developed a real-time cryptocurrency price tracker using Flutter and Dart, scraping live data via Gecko API and web scraping techniques.
- Stored historical price data in Cloud Firestore and displayed candlestick charts for users to visualize trends and patterns.
- Implemented responsive UI using FlutterFlow, ensuring seamless performance across devices and platforms.
- Collaborated with a team to integrate Firebase for user authentication and cloud-based data storage, providing a secure and scalable backend.

Instagram Video Scraper + Auto YouTube Shorts Uploader | *Selenium, BS4, Flutter, FastAPI, GenAI*

- Developed a Python script to automatically scrape Instagram videos while scrolling through reels using Selenium and BeautifulSoup.
- Automated the uploading of videos to YouTube, including generating video tags and metadata using GenAI for improved search visibility.
- Built a cross-platform interface using Flutter, allowing users to configure scraping settings and monitor uploads in real-time.
- Integrated FastAPI to handle backend processes, optimizing task execution and performance.

TECHNICAL SKILLS

Languages: C, C++, Java, Python, Dart, Go, JavaScript, Rust, HTML5.

Frameworks: Angular, ReactJS, Vue.js, Django, Flask, Express.js, Electron.js, Tauri, Flutter, Ionic, Spring Boot.

Technologies: Docker, Kubernetes, REST, JSON, TypeScript, GenAI, Selenium, BS4, FastAPI, HIL, SIL, Over-the-Air Updates (OTA).

Developer Tools: Git, Docker, Google Cloud Platform, AWS, Firecracker, Kubernetes, QEMU, Redis, Agile, SCRUM, Linux, JIRA, Test Automation Frameworks.

Database: MongoDB, PostgreSQL, Oracle, MySQL, MariaDB, Firebase, D-Graph, SQLite

Testing: Test-Driven Development (TDD), Hardware-in-the-Loop (HIL), Software-in-the-Loop (SIL), Test Case Development, Automated Testing.

Soft Skills: Attention to Detail, Cross-Functional Collaboration, Communication Skills, Problem-Solving, Algorithm Design.

EDUCATION

Masters in Software Engineering
Arizona State University

August 2024 – Current

Bachelors in Computer Science
Savitribai Phule Pune university

August 2019 – July 2023