

Sumit Rodrigues

+1562-549-9508 | Los Angeles, CA | sumitrod11@gmail.com | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

PROFESSIONAL EXPERIENCE

Web Developer Student Assistant

August 2023 – Present

California State University - College of Communication

Fullerton, CA

- Created full-stack web applications using **HTML5**, **CSS3** and **Javascript**, enhancing system scalability and responsiveness, resulting in faster data processing and a smoother user experience
- Converted **Figma designs** into reusable, interactive **React** components for TUSK Magazine, improving **UI** consistency and development speed by **25%**
- Integrated **TitanGPT** (ChatGPT-4o) as a **chatbot** feature on the Communications website, enabling students and professors to quickly navigate resources, find relevant information instantly, reducing navigation confusion
- Optimized **Linux**-based servers using **C++ multithreading**, reducing processing latency for speech analysis applications and achieving **99% uptime**

Software Engineer

September 2021 – July 2023

BNP Paribas (Bank of the West & BMO)

Mumbai, IN

- Led the transition from monolithic systems to a modular **C++ backend architecture**, reducing query execution times by **50%**
- Designed a real-time financial dashboard using **C++** for data processing and **D3.js** for visualization, enabling financial analysts to process large-scale datasets efficiently
- Developed distributed computing algorithms to handle **massive financial datasets**, improving system throughput by **3x**
- Automated **CI/CD pipelines** with **Jenkins**, **Docker**, and **Kubernetes**, cutting deployment time from **4 hours to 20 minutes**, ensuring zero downtime during releases
- Built an automated pipeline for creation of masking jobs in **Delphix Masking Tool** using **Python scripts**, leading to a **45%** reduction in processing time
- Implemented **multi-threaded transaction processing** in **C++**, enhancing the performance of high-frequency trading applications

Software Engineer Intern

May 2020 – July 2020

TechHighway Systems Pvt. Ltd.

Pune, IN

- Created a **high-performance e-commerce transaction engine** in **C++**, reducing backend processing latency by **25%**
- Implemented **low-level memory optimizations** and caching strategies in **C++**, leading to **20% faster response times** under high traffic
- Developed **network security monitoring tools** using **Python**, **Go**, and **SQL**, enabling **real-time alerting for security threats**

PROJECTS

Inventory Prediction System | Python, Machine Learning, SQL, Vue.js, Nest.js, AWS

May 2024 – July 2024

- Developed an AI-powered inventory prediction dashboard with **Vue.js** for real-time demand forecasting, reducing fleet costs by **35%** and stockouts by **20%**
- Integrated secure APIs with **Nest.js** and **MySQL**, ensuring data consistency and real-time updates

Evergreen Bank | NextJS, TypeScript, React, Tailwind CSS, Chart.js, NPM, Vercel

May 2024 – July 2024

- Built a **financial dashboard** with real-time bank data using **Plaid** and **Chart.js** for visualizations
- Applied **React Hook Form + Zod** for robust form handling and data validation, ensuring high data integrity

ArticleBuzz – Predictor | React.js, AWS, XGBoost, NGINX, Python

August 2023 – December 2023

- Implemented a prediction system using **machine learning algorithms**, to forecast an article's reach based on social media shares, achieving a **96.78% success rate** using the **XGBoost algorithm**
- Cloud computing Technologies used were **AWS EC2 Instance**, **SageMaker**, **Lambda Function**, **S3 Bucket**

EDUCATION

California State University, Fullerton

Fullerton, CA

Master of Science, Computer Science (GPA 3.8/4.0)

August 2023 - Present

Relevant Courses: Advanced Algorithms, Advanced Blockchain, Cloud Computing, Advanced Database Systems

University of Mumbai, India

Mumbai, IN

Bachelor of Engineering, Computer Science (GPA 3.25/4.0)

August 2017 - May 2021

Relevant Courses: Operating Systems, Artificial Intelligence, Data structures, Object-oriented programming

SKILLS

Languages and Frameworks: C++, JavaScript, TypeScript, React.js, Node.js, Nest.js, React Native, Redux, TailwindCSS, Java, Python, MySQL.

Cloud Technologies: Azure, Google Cloud, AWS (Sagemaker, EC2, Lambda, S3).

Software and Tools: JIRA, Vite, Webpack, Storybook, Postman, GitHub, Bitbucket, Google Analytics, MongoDB.

Certifications: Oracle Cloud Infrastructure Generative AI Professional