VEDANT SAWANT

Stony Brook, New York

EDUCATION

Stony Brook University Aug 2022 - May 2024

Master of Science in Computer Science

New York, USA

Coursework: Operating Systems, Computer Networks, Distributed Systems, Machine Learning, Database Systems, VR/AR.

Teaching Assistant: CSE 366: Introduction to Virtual Reality

University of Mumbai Aug 2018 - Jun 2022

Bachelor of Engineering in Computer Engineering

Mumbai, India

Coursework: Data Structures and Algorithms, Object Oriented Programming, Big Data Analytics, Artificial Intelligence, NLP.

EXPERIENCE

Electronic Arts May 2023 - Aug 2023

Software Engineer Intern

Redwood Shores, California

- Developed and deployed an insights tool for **EA Data & AI** platform, optimizing engagement tracking for over **100 million** users.
- Led the design and implementation of high-performance **Spring Boot** APIs within the **microservices** architecture, managing nearly **3000+** user segments with millisecond SLA, ensuring scalability and performance.
- Assisted in generating **15** new metrics for data scientists, resulting in actionable insights for revenue-generating campaigns.
- Leveraged **Stencil.js** & **D3.js** to create a performant and framework-agnostic web component library for **data visualization**, promoting code reuse and UI consistency across **React** and **Angular** projects.
- Conducted rigorous end-to-end testing across tools and APIs to ensure stability and reliability under high-load conditions.

Virtubox Oct 2020 - Jan 2021

Full-stack Engineer Intern

Remote, India

- Designed and built customizable UI components using **React.js** for the content management system used by **100+** businesses.
- Implemented caching strategies to enhance API response times by 15% to facilitate content delivery across multiple platforms.

PROJECTS AND PUBLICATIONS

Fault-Tolerant Key/Value Store with Raft | *Go, qRPC*

2023

- Developed a fault-tolerant key/value storage system using the Raft consensus algorithm in **Go** for 9 simulated server instances.
- Implemented election dry-run and request batching, resulting in **30%** reduction in leader election times and **20%** increase in system throughput.

Virtual Avatar for Zoom | *Python*, *PyTorch*

2023

- Engineered a real-time pipeline processing audio input, generating facial animation output with a latency of **50** milliseconds.
- Designed architecture for Zoom integration using virtual camera, achieving seamless video stream injection during calls.

Car Rental Website | TypeScript, MERN, React.js, Node.js, Express.js, MongoDB

2023

- Designed and built an end-to-end responsive ecommerce web application in React, integrating Stripe for secure payments.
- Developed secure RESTful APIs using **Node.js** and **Express.js** for seamless user authentication, reservation management, real-time availability checks, and efficient data handling with **MongoDB**, leveraging its NoSQL architecture for scalability.

DNS Resolver | *Python, dnspython*

2022

- Developed a high-performance DNS resolver with recursive queries, reducing redundant queries by 30% compared to iterative.
- Performed comprehensive **performance analysis** of custom DNS resolver against industry benchmarks(Google Public DNS).

Prediction of Malnutrition among children | *Python, Django, D3.js, Docker, AWS EC2*

2022

- Co-authored a study analyzing healthcare data, identifying key factors from over 1300 features via correlation analysis.
- Trained a prediction model in **Python** with **50%** fewer features via dimensionality reduction, while maintaining high accuracy.
- Built a survey website for data collection and prediction, leveraging **Django** to build a **REST API** and deploying it on **AWS EC2**.

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, Java, Golang, C++, C#, SQL, HTML5, CSS, PHP, Bash

Frameworks: Node.js, Express.js, React, Redux, Next.js, Angular, Spring Boot, Django, Android, Stencil, D3.js, PyTorch, Flask

Databases: MySQL, DB2, PostgreSQL, MongoDB, Redis

Technologies: Linux, Spark, AWS (EC2, S3, Sagemaker), GCP, Apache Kafka, Git, Docker, Webpack, GraphQL, Webpack

LEADERSHIP / EXTRACURRICULAR

- Computer Society of India Organized and conducted technical workshops such as Python, Java, and React for 100+ students.
- Executive Team Leader at VESIT Connect Led a team of 9 to design the monthly college newsletter, utilizing strong communication skills to collaborate internally and effectively engage with faculty, staff, and students.
- Volunteer Teacher at U&I Trust Created innovative study material to teach Mathematics to underprivileged high school students.