

DHRUMIL PIPALIYA

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Education

Pace University, Seidenberg School of Computer Science and Information Systems
MS in Computer Science | **Concentration:** Software Developer

New York City , New York
May 2026 Expected

K J Somaiya institute of Information Technology
BTech in Computer Engineering | **GPA: 8.67**

Mumbai , Maharashtra
May 2024

RELEVANT COURSEWORK

Algorithms & Computing Theory | Database Management System | Artificial Intelligence | Machine Learning | Internet Programming | Quantitative Analysis | Distributed Computing

TECHNICAL SKILLS

Programming Languages: Python, Java, C++, C, JavaScript, R, Typescript, Kotlin, PHP, Go, Rust

Database Management: MySQL , SQL , PostgreSQL, Mongo DB, Maria DB, Dynamo DB, Oracle, Cassandra, Redis, Firebase

Software / Tools: Git, Github, Jenkins, Bitbucket, Jira, Matlab, AWS, Docker, Microsoft Azure

Machine learning : TensorFlow, PyTorch, Scikit-learn, Keras, NumPy, Pandas, Matplotlib, Google collab, Jupiter notebook

Operating Systems: Linux, Ubuntu, Windows , macOS

ACADEMIC PROJECTS / PERSONAL PROJECTS

SQL Injection Detection Using Reinforcement Learning

- Developed a reinforcement learning model using Q-learning and a hybrid CNN-SVM architecture to detect SQL injection attacks. Utilized Python libraries such as TensorFlow, Keras, and scikit-learn to build and train machine learning models, demonstrating proficiency in relevant software development tools and technologies.
- Designed and conducted experiments using benchmark datasets to evaluate the performance of the RL-based approach, validating the model's accuracy and resilience in detecting SQL injection attacks. Published my research paper in ANVESAK journal.

Break-Bite

- Engineered a mobile-first application utilizing the Flutter framework to develop a cross-platform canteen ordering system, leveraging Dart language features for UI rendering and state management.
- Designed a RESTful API to handle asynchronous communication between the mobile application and the backend, facilitating data exchange for menu display, order placement, and real-time updates and integrated Razorpay API.

Mediaid

- Built a responsive AI healthcare assistant web app using **TypeScript**, **React**, and **Tailwind CSS**, enabling users to input symptoms and receive specialist recommendations with **~85% accuracy**, increasing diagnostic guidance efficiency by **60%**.
- Integrated **AI-based symptom classification** using NLP techniques to interpret user inputs and match them to relevant medical specialties, reducing false matches by **23%** through iterative model refinement and real-world test cases.
- Implemented secure **user authentication**, structured frontend architecture with TypeScript typings, and deployed the app via **Netlify** (frontend) and **Render** (backend), achieving **99.8% uptime**.

PROFESSIONAL EXPERIENCE

Marquee-Full Stack Developer
India

Pune,
June 2024 – August 2024

- Contributed as a junior developer on OCI C driver for PostgreSQL, achieving improved Oracle compatibility through reverse engineering. Optimized & enhanced ODBC C driver for PostgreSQL databases with Oracle compatibility, resulting in performance gain in query executions. • Resolved 20+ critical issues in the Python driver for Apache AGE project as an open-source contributor, enhancing its stability and reliability. Initiated Oracle OCI driver development in C for PostgreSQL databases from scratch, achieving compatibility with Oracle and scalability, and providing a framework for subsequent phases.

Goldenmace IT Solutions -Full Stack Developer
India

Navsari,
June 2023 – August 2023

- Led the development of a business dashboard using React.js, Node.js, and Angular.js, improving client satisfaction by 20% through an intuitive user interface.
- Implemented TypeScript and Svelte for code optimization and caching mechanisms, boosting dashboard performance by 30%. Integrated PostgreSQL and MongoDB for data storage, ensuring fast and efficient data retrieval.

