RAHUL TRIVEDI

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Purdue University, Indiana

GitHub
LinkedIn
Personal Website

Education

Master's in Computer Science: Purdue University, Indiana *(CGPA: 4.0/4.0)* *2023 - Present*

Bachelor of Technology in Computer Science: Vellore Institute of Technology, Vellore *(CGPA: 8.2/10)* *2017 - 2021*

Technical Skills and Interests

Programming & Frameworks: Python, Java, C#, C/C++, Rust, .NET, Springboot, Flask, OOP's

Web Development: HTML, CSS, Bootstrap, SASS/SCSS, Tailwind, JavaScript, React.js, Vue.js, Node.js, API Design

Tools & Version Control: Docker, Kubernetes, Git, GitHub, Bitbucket, AWS, Mocha, Cypress, CI/CD

Cloud & Databases: MongoDB, Firebase, MySQL, MS SQL Server, PostgreSQL, Oracle SQL

Work Experience

- **Teaching Assistant** *January 2023 – Present*

Purdue University, Indiana

  - As a Teaching Assistant for Professor David Liu, I develop assessment tools, evaluate assignments, and provide student feedback. I offer technical support, assist with coding, and collaborate on research projects.
  - Assist Professor with projects in emerging technologies such as Generative AI and Quantum Computing.

- **Software Engineer** *May 2020 – December 2022*

Trivedi Marble Industries, Gujarat, India

  - Developed custom software to streamline manufacturing and improve efficiency, including systems for inventory, order processing, and quality control, boosting production by 40% and sales by 50%.
  - Modernized IT infrastructure and optimized database management, enhancing system reliability, reducing downtime, and improving sales forecasting accuracy by 15%.
  - Enhanced business and management skills by turning losses into profits, excelling under pressure, improving people skills, and achieving high customer satisfaction.

- **Software Engineering Internship** *May 2019 – December 2019*

easilyDone Technologies LLP, Gujarat, India

  - Managed the design of the company's RSVP-based web application 'Events' using Vue.js and HTML technologies.
  - Implemented various features in the mobile application utilizing Google Firebase as the database and React Native framework. Received comprehensive training in Amazon Web Services (AWS) and Node.js to enhance technical proficiency.

Research Publication

- **A novel machine learning inspired algorithm to predict real-time network intrusions**
  - Journal: Springer | Published: 02/05/2022 | Publication Link

- **K-Mean and Mean Shift Algorithms in Machine Learning Model for Efficient Malware Categorization**
  - Journal : Inder Science Publishers | Published: 08/07/2022 | Publication Link

Projects

- **Mood-Musica: A Music Recommendation System Based on Emotions** *June 2024*

Designed a mood-based music recommendation system.

  - Leveraged cutting-edge Machine Learning algorithms to accurately detect users' facial expressions and landmarks. Integrated with Spotify API to fetch personalized song recommendations based on the detected emotions. Implemented features allowing users to save, like, and delete suggested songs, enhancing user engagement. Enabled seamless user experience by incorporating Spotify login authentication.
  - Technology Utilized: Python Flask, React.js, Google Firebase

- **Job Tracker - A Google Chrome Extension** *December 2023*

Designed a Google Chrome extension to keep track of new and applied jobs.

  - Implemented features like One-Click Job Listing Tracking, LinkedIn Integration, Bookmarking for Applied Jobs, Keyword-Based Job Information Display, Application Status Tags on Job Listings, CSV Export for Applied Jobs, Authentication and Authorization, Page Mutation Observer.
  - Technology Utilized: C#, React.js, MS Azure

- **FRAV – A Project Management Application (Jira Clone)** *April 2023*

Designed a web application specializing in project management.

  - Developed dynamic role allocation, code-first approach for database creation, and Virtual DOM in React. Created a one-page application with features like Sprints and Backlogs. Used REST API for the backend, JWT Tokens for authentication and authorization.
  - Technology Utilized: React.js, Node.js, Bootstrap