# Pradeep Diguvidi

✉ **Email** | ▉ **+1 (669)-321-6111** | 🌐 **Website** | ⓖ **GitHub** | 🔗 **LinkedIn**

## Education

**San Jose State University**                                                  San Jose, CA
*Master of Science in Computer Engineering*                          *Aug. 2023 – Dec. 2025*

**Coursework:** Web UI Design, Operating Systems, Computer Architecture, Data Mining, Software Quality Assurance, Algorithms and Data Structures, System Software, Software Security Techniques.

## Experience

**Software Engineer**                                                  Aug. 2019 – Jun. 2023
*Tata Consultancy Services (TCS)*                                          *Bengaluru, India*

- Developed a full-stack e-commerce platform using **React.js** and **Spring Boot**, driving a **30% increase** in online sales through enhanced virtual shopping experience.
- Engineered high-performance backend using **Java**, **Spring MVC**, and **MySQL**, resulting in **30% faster** database operations and improved data management efficiency.
- Implemented test-driven development (TDD) with comprehensive **RESTful API** architecture, achieving **95% test coverage** and reducing production bugs by **90%**.
- Led development of healthcare scheduling platform using **Java**, **Angular**, and **Spring Boot**, resulting in a **25% improvement** in appointment efficiency.
- Architected secure healthcare application using **Spring Cloud Dataflow**, **Java**, and **MySQL**, implementing **HIPAA-compliant** encryption protocols.
- Designed and optimized **SQL database schema**, improving query performance by **40%** while maintaining strict data security standards.

## Projects

**Edu-Genius** | *MERN Stack, AI, GPT-4o-mini* | **GitHub**                          Jan. 2025 – Dec 2025

- Full-stack AI-powered educational platform built with **MERN stack**. Features intelligent tutoring via **LLM integration**, user management with **JWT authentication**, and persistent chat system with **MongoDB**. Includes rate limiting, **CORS protection**, and responsive **React** frontend with **Material-UI**.

**Traffic Accident Prediction System** | *Python, LLM, Data Mining*                          Aug. 2024 – Dec. 2024

- Applied ML models to analyze urban collision patterns, achieving an AUC-ROC of **0.9939** and accuracy of **96.83%**.

**Android Malware Detection** | *Python, LLM, Cybersecurity*                          Aug. 2024 – Dec. 2024

- Built ML-based malware detection system with **81% accuracy** using behavioral analysis and Random Forests.

## Technical Skills

**Languages:** Java, C++, C, Python, JavaScript, HTML/CSS, Shell Scripting, TypeScript, SQL
**Front-End:** Angular.js, Angular, Bootstrap, jQuery, AJAX, React.js, Node.js, JSON, Material-UI
**Back-End:** Flask, FastAPI, Django, Spring Boot, Spring MVC, Ruby on Rails
**Databases:** AWS DynamoDB, MySQL, MongoDB, Google BigQuery, PostgreSQL, Redis
**Tools:** Git, Visual Studio, PyCharm, IntelliJ, Eclipse, Docker, Kubernetes, Jenkins, Linux
**Libraries:** pandas, NumPy, Matplotlib

## Achievements

- Received **"Innovation Excellence Award"** for developing a solution that reduced processing time by **30%**.
- Awarded **"Best Performance Award"** for exceeding performance targets by **150%** over two consecutive quarters.
- Recognized with **"Outstanding Achievement in Automation"** award for designing a system that improved efficiency by **40%**.