Pranav Sai Musham

United States | +1-317-438-8200 | pranavsaimusham@gmail.com | [Linkedin](#) | [Github](#) | [Portfolio Website](#)

TECHNICAL SKILL

- **Software Development Life Cycle (SDLC)**: Agile Kanban Methodology, Waterfall Model
- **Programming Languages**: Java, Python, C++, C, Javascript
- **Databases**: MySQL, MongoDB
- **Web Development**: HTML, CSS, Bootstrap, FlexBox, React.js, Node.js, RESTful APIs, jquery, SpringBoot, JWT
- **Miscellaneous**: Selenium, TestNG, Jira, GitHub, OpenCV, Scikit-learn, Tensorflow, Spacy, Streamlit

EXPERIENCE

Virtusa Consulting Services | *Associate Engineer* | Hyderabad, India   **Jun 2022 - Jul 2024**
- Participated in Agile-based SDLC using Kanban, increasing sprint efficiency and reducing time-to-market by 16%.
- Engineered scalable web applications leveraging React.js, Redux, TypeScript, Node.js, Spring Boot, and MongoDB/MySQL, maintaining 99.8% system uptime.
- Enhanced application security by integrating JWT & OAuth2 authentication, RBAC, and mitigating SQL injection vulnerabilities, decreasing security threats by 60%.
- Streamlined deployment pipelines using Jenkins and GitHub Actions accelerating delivery timelines by 40% and minimizing outages.
- Optimized Git workflows, reducing merge conflicts by 25% and enhancing team productivity.

Virtusa Consulting Services | *Intern Delivery* / Hyderabad, India   **Dec 2021 - Mar 2022**
- Developed 50+ reusable React.js components with Material-UI and Tailwind CSS, reducing UI development time by 40%.
- Built and optimized RESTful APIs using Node.js and Express.js, cutting data retrieval time by 30%.
- Executed automated test suites with Postman, Jest, and Selenium, raising test coverage to 85% and identifying 75+ bugs across UI/UX and browsers.
- Managed version control with Git and GitHub, streamlining collaboration and resolving merge conflicts 25% faster.

Goal Street | *Machine Learning Intern*   **May 2020 - Jul 2020**
- Designed and implemented supervised learning models and conducted data preprocessing, achieving 96% accuracy in predictive modeling.

EDUCATION

Indiana University Indianapolis | Indianapolis, USA   **Aug 2024 - May 2026**
Master of Science, Computer Science (GPA: 3.58/4)
- **Graduate Teaching Assistant** for N207: Data Analysis using Spreadsheets, N211: Introduction to Databases, and NEWM-N510: Web Database Development
- **Coursework:** Algorithms Design and Analysis, Machine Learning, Computer Networks

Sreenidhi Institute of Science and Technology | Hyderabad, India   **Aug 2018 - May 2022**
Bachelor of Technology, Computer Science and Engineering (GPA: 8.18/10)
- **Coursework:** Data Structures & Algorithm, Databases, Operating Systems, Computer Networks, Object Oriented Programming

PROJECTS

Printer Service Application | React.js, SpringBoot, Node.js, MySQL
- Created a full-stack CRUD web app using React, Node.js, Spring Boot, and MySQL to streamline printer service scheduling.

Traffic Sign Classification | CNN, Tensorflow, Tkinter
- Synthesized and trained a CNN model with TensorFlow for classifying 42 traffic signs, integrated into a real-time GUI using Tkinter.

Face Mask Detection | CNN, MobileNet, OpenCV, Tkinter, Keras
- Constructed a MobileNetV2-based deep learning system with OpenCV for live face mask compliance, reaching 98% detection accuracy.

Recipe Advisor | Python, NLP, Spacy, Streamlit, Kmeans Clustering
- Implemented a recipe recommendation app using NLP (Spacy) and K-Means clustering with a Streamlit-based UI for ingredient-based suggestions.

Real Estate Application | React.js , Node.js, Tailwind CSS, MongoDB
- Programmed a responsive web platform using React, Node.js, Tailwind CSS and MongoDB to list, search, and filter properties with user authentication and dynamic routing.

CERTIFICATIONS

- **Certified Tester Foundation Level Agile Tester (CFTL-AT)**: ISTQB
- **Certified Tester Foundation Level (CFTL)**: ISTQB