MUKUND GORUGANTHU

Software Engineer

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Place: Cincinnati, Ohio, United States

EDUCATION

Master of Science in Information Technology
University of Cincinnati, OH, USA
CGPA: 4.0/4.0   Aug 2024 – Dec 2025

Bachelor of Engineering in Computer Science and Engineering
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Tamil Nadu, India
CGPA: 9.88/10   Aug 2019 – May 2023

TECHNICAL SKILLS

- Programming Languages: C, C++, Python, Java, JavaScript, TypeScript
- Web Development: HTML5, CSS3, Bootstrap, Django, JSON, React JS
- Database Systems: MySQL, MS SQL Server, NoSQL
- Workflow Management & SDLC: Jira, Waterfall, SAFe Agile
- Data Analytics: PowerBI
- Others: GIT, Data Structures & Algorithms, System Design, Object-Oriented Programming, Node.js, REST

CERTIFICATIONS

Great Learning:

- Python Fundamentals for Beginners – Acquired foundational knowledge of **Python** programming.
- Front-End Development – HTML – Gained expertise in creating user interfaces using HTML.
- React JS Tutorial – Developed skills to build dynamic web pages using the **React Js**.
- Types of Cybersecurity – Gained insights into various cybersecurity concepts.
- Cloud Foundations – Built a strong understanding of foundational cloud computing concepts.

Coursera:

- HTML, CSS, and JavaScript for Web Developers – Gained experience in designing and developing responsive web pages.
- Programming for Everybody (Getting Started with Python) – Gained expertise in Python and explored its real-world applications.
- Cybersecurity for Everyone – Acquired a comprehensive understanding of the cybersecurity concepts.

PUBLICATIONS

- "Text Encoder Using Neural Networks" – Published in the *International Journal of Scientific Research in Engineering and Management (IJSREM)*, February 2023.

ACADEMIC PROJECTS

Text Encoder Using Neural Network
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Tamil Nadu, India　　　**Jul 2022 – Nov 2022**

Developed a predictive model for handwritten character recognition using **Convolutional Neural Networks (CNNs)** on a dataset of 25,000 characters and achieved **99% accuracy**. Designed a user-friendly interface to upload handwritten characters for real-time validation, showcasing expertise in **deep learning**, **Machine Learning**, and **end-to-end solution development**.

- Developed a predictive deep learning model for handwritten character recognition using Convolutional Neural Networks (CNNs) on a dataset of 25,000 characters, achieving 99% accuracy.
- Designed and implemented a custom handwritten character dataset for training and testing the model.
- Streamlined handwriting recognition with advanced machine learning techniques, including data preprocessing and augmentation.
- Improved model performance and reliability through hyperparameter tuning and comprehensive evaluation metrics.
- Created a user-friendly interface for real-time validation of handwritten characters, ensuring system functionality and accuracy.

Logistic Management Using E-Commerce
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Tamil Nadu, India　　　**Jan 2022 – May 2022**

An interactive online shopping platform that enables customers to search for and purchase goods efficiently. Leveraged HTML, CSS, and JavaScript to create a dynamic and user-friendly interface, integrated with XAMPP for inventory management. Utilized PHP to connect the application to the database, enabling seamless data storage, retrieval, and real-time updates for a smooth shopping experience.

- Developed a data-driven logistics system optimizing e-commerce inventory control, order management, and shipping processes.
- Implemented real-time inventory tracking to provide accurate stock information, reducing stockouts and improving overall inventory management.
- Designed and automated the order management system to streamline customer order processing, order tracking, and fulfillment, minimizing human errors and enhancing customer satisfaction.
- Created a scalable and adaptable system architecture, ensuring that the platform can accommodate varying e-commerce demands and seamlessly scale for future expansions.

WORK EXPERIENCE

Front-End Intern
PureCode AI R&D India Pvt. Ltd., Hyderabad, India　　　**Feb 2024 – Jun 2024**

- Collaborated on the development of a single-page web application leveraging HTML, CSS, JavaScript, React, and MUI to deliver user-centric AI-driven solutions.
- Contributed to implementing secure authentication protocols, interactive carts, automated checkout systems, and browser session management to enhance user experience and system efficiency.
- Designed responsive user interfaces and mobile-friendly navigation paths optimized for all screen sizes, ensuring seamless usability across devices.
- Integrated APIs and optimized performance to build scalable, AI-focused solutions in collaboration with cross-functional teams.
- Conducted rigorous application testing and detailed debugging, delivering a high-performance solution that met both AI-related business demands and user satisfaction.

Intern

PamTen Inc   **May 2025**

• Currently designing and developing an AI-powered Applicant Tracking System (ATS) application using Python, Flask, and React, aimed at intelligently matching resumes with job descriptions through advanced NLP techniques.

• Working on integrating Sentence Transformer models (e.g., BAAI/bge-m3 and all-MiniLM-L6-v2) to compute semantic similarity scores for accurate candidate-job alignment.

• Building end-to-end pipelines for resume parsing, text extraction (PDF, DOCX), and clustering of job descriptions using TF-IDF and KMeans for domain classification.

• Developing a user-friendly interface that allows HR professionals to upload resumes, analyze semantic scores in real time, and export results in multiple formats including JSON, CSV, and PowerPoint.

• In the process of optimizing performance with Python's ThreadPoolExecutor to support scalable and efficient bulk resume processing.

• Implementing rule-based extraction logic to identify legal status, skills, and experience from resumes for enhanced filtering and insights.

• Continuously testing and validating the pipeline to ensure model accuracy, data reliability, and robustness across diverse data formats and job domains.