Sai Pranav M

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Hyderabad, Telangana - 500060, India

EXPERIENCE

• **Hybrid Intelligence Lab, IIITDM [⊕]**   *Dec 2024 - Current*
Research Intern   Chennai, India
  ◦ **IoT Network Routing Research:** Researched dynamic routing in IoT networks using the ESP-NOW protocol, optimizing communication and routing efficiency using the Bellman-Ford Algorithm.
  ◦ **Simulation with Pygame and Simulink:** Simulated network performance to evaluate and improve routing efficiency under varying network conditions.

• **NoQs Digital [⊕]**   *Dec 2023 - Jan 2024*
Data Analyst Intern   Remote
  ◦ **Data Analysis and Insights:** Analyzed data using statistical methods and automated tools, leading to business insights and cost-saving recommendations.
  ◦ **Data Management:** Managed databases, extracted and cleaned data, and created reports to support decision-making for various teams.

EDUCATION

• **IIITDM Kancheepuram**   *Nov 2022 - July 2026*
Bachelor of Technology in Computer Science Engineering   Chennai, India
  ◦ GPA: 8.18/10.00

• **Narayana Junior College, TSBIE**   *2020 - 2022*
Class 11 and 12   Hyderbad, India
  ◦ Grade: 967/1000

• **Panineeya Mahavidyalaya Public School, CBSE**   *2020*
Class 10   Hyderabad, India
  ◦ GPA: 461/500

PROJECTS

• **Gender Classification Using Deep Learning on Facial Images**
Tools: Tensorflow, OpenCV   [⏺]
  ◦ Implemented a CNN-based model on the 'All Ages Faces Dataset', achieving 50% accuracy initially with a CNN, improved to 85% accuracy using VGG pre-trained model.
  ◦ Enhanced using techniques from the research paper "Deep Learning Based Approach for Gender Classification" including dlib preprocessing and VGG architecture.

• **Note-taking Web Application**
Tools: React.js, Django, MySQL, Django REST framework   [⏺]
  ◦ Built a full-stack note-taking app using Django REST for backend, React for frontend, and MySQL for data storage.
  ◦ Implemented features like note creation, editing, deletion, pinning, secure authentication, and sorting by pin status and creation date.

• **OCR-Driven Document Extraction Web Application**
Tools: React, Flask, Roboflow, HuggingFace   [⏺]
  ◦ Developed a React and Flask-based web app providing OCR services for extracting key details from scanned driver's license images.
  ◦ Enhanced text extraction accuracy through image preprocessing and integrated Roboflow 3.0 object detection for improved results.

SKILLS

- **Programming Languages:** C, C++, Python, Javascript, MATLAB
- **Web Technologies:** HTML, CSS, Javascript, React.js, Django
- **Database Systems:** MySQL
- **Data Science & Machine Learning:** NumPy, Pandas, Matplotlib, Seaborn, Scikit-Learn, Tensorflow, OpenCV
- **Other Tools & Technologies:** Power BI, Google Sheets, Selenium, Simulink
- **Other Skills:** Object Oriented Programming, Data Structures and Algorithms, Socket Programming, Web Scrapping

LEADERSHIP/VOLUNTEER EXPERIENCE

- **Core, MATLAB Divsion** _June 2024 - Current_
System Coding Club, IIITDM Kancheepuram

- **Quality Management Team Member** _Feb 2024_
Vashisht 2024, IIITDM Kancheepuram

- **11th Convocation Volunteer** _July 2023_
IIITDM Kancheepuram

CERTIFICATIONS

- **Advanced Learning Algorithms, DeepLearning.AI** _June 2024_
- **Supervised Machine Learning: Regression and Classification, DeepLearning.AI** _June 2024_
- **Machine Learning Onramp, Mathworks** _Aug 2024_