Daniel Prem

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EDUCATION

Karunya Institute of Technology and Sciences, Coimbatore, Tamil Nadu, India

2021 – 2025

Bachelor of Technology in Computer Science

SKILLS

ICT —Python, JavaScript, SQL, HTML, CSS, PyTorch, TensorFlow, Scikit-learn, Keras, NumPy, Pandas, Hugging Face Transformers, Natural Language Processing, Automatic Speech Recognition, Model Fine-Tuning, Hyperparameter Tuning, Data Visualization, Chart.js, Express.js, Firebase, Git, YOLOv8, OpenCV, Machine Learning, Neural Networks, Deep Learning, Computer Vision

Certifications – Google Data Analytics Certification, User-centric Computing for Human-Computer Interaction, Google Foundations of User Experience (UX) Design, Google python crash course, Google Foundations of Data Science (Coursera)

ACADEMIC PROJECTS

Multi-Modal Deep Learning for Dysarthric Speech Detection and Synthesis

2024

- **Developed** a machine learning system that improves speech synthesis for individuals with the speech disorder dysarthria, enhancing their ability to communicate
- Technology used: PyTorch, HuBert, ASR, Whisper, CNN

Library Book Recommendation Chatbot Using Rasa NLU

2023

- Created an AI chatbot that provides personalized book recommendations, thus improving library user engagement
- Technology used: Rasa NLU, DIET Classifier, custom actions, NLU, entity extraction, HTML, CSS, JavaScript
- Presented at Third IEEE International Conference on Smart Technologies & Systems for Next Generation Computing (ICSTSN 2024)

Real-Time Road Monitoring for Autonomous Vehicle Transition in India using Deep Learning

2023

- Developed a system for road hazard detection and classification, contributing to improved road safety
- Technology used: YOLOv8, computer vision, multi-threading, Bootstrap, HTML, CSS, JavaScript, Firebase

WORK EXPERIENCE

Intern, INAI, IIIT Hyderabad | Telangana, India

Aug 2024 – Dec 2024

- Created and updated INAI product demo websites to showcase AI-driven solutions
- Developed an Android app for seamless video capture & built a browser-based application for managing video content
- Worked on AI solutions for clients using the Data Foundation platform

Data Intern, iHub-Data, IIIT Hyderabad | Hyderabad, Telangana

Jan 2024 – Aug 2024

- Developed dynamic dashboards for real-time depot and driver metrics visualization, using data from server-provided CSVs
- Orchestrated systematic data management and dynamic updates, fostering better-informed decision-making
- Leveraged skills in HTML, CSS, JavaScript, Chart JS, and Express JS

Summer Intern, Intel | Bangalore, Karnataka, India

May 2023 – Jul 2023

- Executed and achieved a 91.92% accuracy rate in classifying the Fashion MNIST dataset using Convolutional Neural Networks
- Managed the preparation of datasets, hyperparameter tuning & explored optimization techniques to accelerate inference speed
- Utilized skills in Python, TensorFlow, and Open VINO

Summer Intern, Paladin Software Solutions | Chennai, Tamil Nadu, India

May 2023 - Jun 2023

- **Developed** interactive user interfaces using HTML, CSS, and JavaScript, enhancing user experience
- Managed databases using MySQL & incorporated server-side logic with Node.js and Express.js, increasing system efficiency

Intern, YBI Foundation | Remote

Mar 2023 – Apr 2023

- Applied machine learning techniques to analyze 8x8 pixel images of digits, facilitating predictive modeling
- Leveraged Python and relevant libraries, like NumPy, Pandas, Scikit-learn, for data preprocessing, model construction, and performance evaluation

Summer Intern, CISCO | Remote

Jul 2022 – Aug 2022

• **Devised** a Python program to validate & convert IPv4 addresses, ensuring rigorous debugging processes for ensuring program reliability, enhanced skillset in Python, network protocols, programming, and debugging

EXTRA-CURRICULAR ACTIVITIES

Participant, Intel Unnati Grand Challenge | Karunya Institute of Technology and Sciences

2023

• Secured victory among over 170 competing teams in the Intel® Unnati Grand Challenge Summer 2023, organized with IIIT Hyderabad, for the project "Real-Time Road Monitoring for Autonomous Vehicle Transition in India using Deep Learning"

Coordinator, Annual Cultural Event "Megaplay" | Karunya Institute of Technology and Sciences

2022 - 2024

- **Served** as the Stage Coordinator for Megaplay, managing schedules, coordinating stage activities, and addressing logistical issues, showcasing leadership skills and effective team coordination
- Led a team of 50 volunteers to successfully manage an event that drew over 200 participants and 500+ audience members, making a significant cultural impact within the university community

Member, Google Developer Student Clubs (GDSC) | Karunya Institute of Technology and Sciences

2023

• **Participated** in various tech events, including Google Cloud Study Jams 2023 and earned multiple completion and skill badges, fostering a collaborative knowledge-sharing environment