Jerin Paul

Computer Science and Engineering
Bachelor of Technology
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Summary

Highly motivated individual who is passionate about machine learning with understanding of full-stack development. Experienced in creating robust software solutions, My enthusiasm for machine learning is reflected in my commitment to staying current with the latest advancements in the field and actively seeking opportunities to apply these techniques to real-world problems. Dedicated to innovation at the Machine Learning and full-stack intersection.

Education

•Bachelor of Technology in Computer Science and Engineering *2020-24*
Government Engineering College Idukki CGPA: 8.12/10
APJ Abdul Kalam Technical University

•Higher Secondary *2017-19*
LEO XIII HSS, Alappuzha Marks: 89.92%
Kerala State Board of Higher Secondary Education

•High School Education *2016-17*
Mary Immaculate High School, Alappuzha Marks: 98%
Kerala State Board of Education

Projects

•Accident Alert and Rash Driving Detection | IOT- Machine Learning Academic Project

IOT Device that is implemented on 2-wheelers, which using those sensors detects whether an accident has occurred.

- Transmits real-time sensor data such as: **Tilt, Speed, Location** for live tracking and Prediction of rash driving pattern.
- Collected data from the sensors and trained a **neural network** to predict the driving pattern.
- Developed a Mobile application to track location and Driving behavior in realtime.
- Backend using Fastapi with sqlite as database was implemented for data collection and retraing of the model using real values.
- Containerization using Docker and deployment in Render
- Technology Used: • Python •Fastapi • Flutter • Sqlalchemy • Sqlite • Docker • Keras •Git •Github

•Mess Management App | Academic project

Mobile application to manage the mess effectively and generate monthly bill.

- The users were facing an **issue in mess markings and managements**, and was in need of a solution.
- **Build an mobile application** that enabled users to input their daily meal consumption effortlessly.
- Facilitated easy calculation of monthly bills, streamlining administrative tasks.
- Available in web in **web app** format.
- Dramatically reduced the workload of mess committee and its users, boosting efficiency by **70%**.
- Technology used:• Flutter • Supabase • Git • Github

•Car Price Prediction | Machine Learning

Web application which can be used to predict the price of used cars using machine learning done as a side project

- Employed advanced **data from Kaggle** and harnessed **machine learning algorithms** to construct a predictive model.
- Utilized specific input features to enable the model to achieve a remarkable **91% accuracy** in predicting car prices.
- Technology Used: • Python •Flask • Scikit-learn •Git •Github

•Movie Recommendation System | Machine Learning

Web application that can suggest movies based on movies watched

- Integrated **TMDb (The Movie Database)** to fetch essential movie details based on user-inputted movie titles, enabling seamless access to information and empowering a **recommendation system** for a more enhanced movie-watching experience by suggesting movies with similar patterns.
- Used **cosine similarity** for clustering and text to vector method bag of words for vectorization
- **80%** more enhanced user engagement by offering personalized movie recommendations based on the selected movie's characteristics.
- Technology Used: • Python • Streamlit• Scikit-learn(clustering) •Git •Github

Experience

•IEEE Kerala Section *Jan 2023 - Present*

Web Master

- Proficient in web frameworks like React and Next.js.
- Successfully maintained the official website for the Computer Society, ensuring its continuous functionality and up-to-date content.
- Designed and launched websites for flagship events, resulting in a significant boost in publicity, with over a 70% increase in visibility and engagement.
- Regularly updated and managed various IEEE events and activities.
- Skills: • Web development • React • Next.js

•Technoship Cell *Jan 2023 - Present*

Chairperson

- Coordinated and organised various events and workshops.
- Worked as team along with the executive members for the welfare of the student.
- Skills: • Leadership • Communication • Team work • Time management

Technical Skills and Interests

Languages: C, Python, Javascript, Dart, HTML+CSS, Java, fastn
Libraries : React.js, Next.js, Pandas, Numpy, Scikit, Flutter, Pytorch, Matplot, Fastapi, SQLAlchemy, Streamlit, Docker.
Dev Tools: VScode, Git, Github, Latex.
Databases: Relational Database(MySql,Sqlite)
Relevent Coursework: Data Structures & Algorithms, Operating Systems, Object-Oriented Programming, Database Management System, Machine Learning.
Areas of Interest: Full-stack Development, Machine Learning, Data Science.
Soft Skills: Problem Solving, Self-learning, Leadership, Communication, Teamwork, Analytical skill.

Extra Curricular

•Class Mentor Git & Github Workshop *Mar 2023*

- Mentored the workshop.
- Taught students about the benefits of Git & Github in field of software engineering with hands-on experience.

•Class Mentor Introduction to Programming using Python *Mar 2023*

- Mentored the workshop.
- Gave an brief introduction and basics of programming using python.

•Winner - CTF Aswamedham CTF *August 2021*

- Secured first prize in all Kerala CTF, Aswamedham conducted by GTECH Mulearn.

•Volunteer IEEE AICSSYC'23 *Oct 2023*

- Volunteer
- Was in the volunteer team and also in the registration team.

•Participation - Hackathons Slash_Key, PiHack, .hack() *2022-2023*

- Participated in various hackathons organised by various communities like IEEE, GTECH.
- Made state of the art solutions to different problems.