

Meena Gopalakrishnan

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EDUCATION

University of Waterloo

BASc in Computer Engineering (Honours)

Waterloo, ON

Sept. 2023 – Jun 2028

PROJECTS

EcoTrackr | Javascript, Typescript, React Native, Python, fastAPI, Expo, Axios

- Developed a full-stack React Native mobile app supported by a FastAPI-powered Python backend, serving a streamlined REST API for data flow
- Incorporated UI libraries to enhance user experience and interface design
- Implemented Axios for HTTP requests handling, enhancing communication between RN frontend and backend
- Researched and designed app to help users live more sustainably & track + reduce their carbon footprint

Cine.fm: AI Movie-based Playlist Generator | Python, Transformers, Pandas, Sklearn

- Leveraged Transformers library from Hugging Face to integrate natural language processing models for content/sentiment analysis and feature extraction
- Implemented clustering (KNN algorithms, cosine similarity) for content based filtering
- Utilized Pandas, Numpy & Scikit-learn for feature extraction, dimensionality reduction, and model evaluation
- Currently working on Streamlit web interface with jupyter notebook integrating Spotify API

Rust-based Web Crawler | Surf, Async-Std, Rust, Git

- Developed web scraping system in Rust, using scraper and reqwest for HTML parsing and data extraction
- Developed a RESTful API using Actix-Web in Rust to serve scraped data to frontend client
- Integrated backend API with frontend using JS, dynamically updating webpage with scraped data using fetch API

EXPERIENCE

AI Engineer

Jan 2024 – Apr 2024

Microsoft WEA - Azure & AI / University of Waterloo

Waterloo, ON

- Developed AI pipeline for an AI-driven financial advisor using Azure Machine Learning and App Services, providing personalized ETF recommendations based on user portfolios and market analysis
- Designed regression and classification models using Azure ML, Azure SQL DB, & Azure Databricks for portfolio analysis and ETF recommendation, increasing portfolio performance by estimated 15%
- Led cross-functional team collaboration, effectively communicating with diverse team to develop product

Firmware Engineer

Sep 2023 – Present

Midnight Sun Design Team - University of Waterloo

Waterloo, ON

- Collaborated with team to develop/optimize C-based firmware for critical automotive systems
- Inspected & improved power distribution, battery monitoring, and driver controls
- Designed improvements for telemetry system for real-time vehicle data tracking

Tutor, Physics & Chemistry

Apr 2021 – Feb 2022

IQuation

Mississauga, ON

- Tutored high school student in Physics and Chemistry, resulting in a 20% increase in grades
- Planned and conducted 30+ lessons based on the student's homework and the curriculum
- Successfully coordinated lessons with manager and student through timely communication

TECHNICAL SKILLS

Languages: Javascript, Typescript, Python, C/C++, HTML, CSS, Rust, Dart, SQL

Frameworks: React, React Native, Node.js, Expo, FastAPI, Tensorflow, Flutter

Developer Tools: Git, Microsoft Azure, Github, VS Code, XCode, Jupyter Notebook, Confluence

Libraries: Pandas, NumPy, Matplotlib, Three.js, Axios, Scikit-learn, Keras, UI Kitten, Material UI

CERTIFICATIONS

Microsoft Certified: Azure AI Fundamentals

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