# Meena Gopalakrishnan

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# **EDUCATION**

# University of Waterloo

Waterloo, ON

BASc in Computer Engineering (Honours)

Sept. 2023 - Jun 2028

### Projects

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

Jan 2024 – Mar 2024

- 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 Feb 2024 - Mar 2024

- 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
- Currenly working on Streamlit web interface with jupyter notebook integrating Spotify API

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

Mar 2024

- Built a Web crawler in Rust with Surf and Async-Std
- Implemented data parsing algorithms in Rust to extract relevant information from web pages
- Utilized concurrency primitives in Rust to parallelize crawling tasks

#### EXPERIENCE

**AI** Engineer

Jan 2024 – Present

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
- $\bullet$  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 **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 Microsoft Certified: Azure Fundamentals