

Sineha Manivannan

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Technical Skills

Languages	Python, TypeScript/JavaScript, Java, C/C++, HTML5/CSS, SQL
Technologies	Django, Node.js, React/React Native, Angular, Flask, Selenium, MongoDB, TensorFlow, NumPy
Tools/Methodologies	AWS, Scrum/Agile, IntelliJ, Git, Bash, Docker, Jira, VS Code, OOP, Software Architecture, Kanban, Bash

Experience

Norwegian Research Centre for AI Innovation (NorwAI)

Trondheim, Norway

FULL STACK SOFTWARE DEVELOPER IN AI

January 2024 - April 2024

- Engineered interactive academic progression graphs within an AI-based learning tools platform as a member of the NorwAI team within the Norwegian University for Science and Technology, employing D3.js, Python, Flask, and SQLAlchemy and seamlessly integrating relational and hierarchical structures into one dynamic visualization, which resulted in a 75% increase in user satisfaction as indicated by user surveys.
- Led comprehensive research on NLP integrations into the learning application, exploring diverse methodologies to optimize user interactions.

Cyclica Inc.

Toronto, ON

FULL STACK SOFTWARE DEVELOPER

January 2023 - April 2023

- Implemented end-to-end functionality using Python, Django REST framework, and React into a bioinformatics application based on machine learning to allow for molecules to be filtered by their properties, contributing to improved data analysis.
- Supported full-stack web application development for a data-driven drug discovery pipeline platform by writing Django queries, prototyping new functionality, conducting bug fixes, and writing unit tests.

Uptake Canada Inc.

Mississauga, ON

SOFTWARE QUALITY ASSURANCE ENGINEER

May 2022 - August 2022

- Designed 90+ automated UI and API tests utilizing Java, JUnit Framework, Selenium WebDriver, Jenkins, Git, Jira, and Bitbucket, substantially improving the company's operations by streamlining the testing process and yielding a reduction of 40 hours annually in manual QA time.
- Enhanced customer satisfaction in software through completing automation verification, fixing failing automated tests, and mobile app testing.

WealthMetric Analytics

Toronto, ON

DATA SCIENTIST (PART-TIME)

May 2023 - October 2023

- Engineered a cutting-edge stock trend prediction web application, harmonizing Streamlit, pandas, NumPy, YFinance, TensorFlow, and Keras.
- Optimized portfolio strategies for clients by harnessing the Random Forest Regressor alongside pandas, NumPy, and Matplotlib.

Tricks with Bricks

Newmarket, ON

ADMINISTRATIVE ASSISTANT, INSTRUCTOR, SOCIAL MEDIA MANAGER

November 2019 - June 2021

- Elevated positive brand recognition through planning and promoting STEM classes, thus increasing program registrations by 25%.
- Managed social media pages through the exertion of marketing strategies and content research, expanding online audience by 500+ members.

Projects

Cloth Conscious: "Life Moves Fast, Fashion Moves Faster" | Flask, Python, JS, HTML, CSS

- Developed a web application to challenge the fast fashion industry by calculating sustainability scores for clothing items from major companies through a customized sustainability algorithm based on the environmental impact of fabrics, thus revolutionizing sustainable fashion.
- Integrated OpenAI API for automated advocacy letters, harnessed SQLite and web scraping to manage a database of clothing items, and applied FuzzyWuzzy string similarity searching to recommend sustainable alternatives, fostering corporate accountability and driving policy changes.

Oncolify: Breast Cancer Tumor Classifier | TensorFlow, NumPy, Python

- Designed and implemented a neural network model to determine if breast cancer tumors are malignant or benign, leveraging TensorFlow, Keras, NumPy, Matplotlib, and scikit-learn, showcasing expertise in crafting machine learning models for medical data classification tasks.

Education

University of Waterloo

Waterloo, ON

BACHELOR OF COMPUTER SCIENCE, HONOURS, CO-OP PROGRAM

September 2021 - April 2026

- VP Internal and previously Logistics Director for **UWaterloo Product Management Club** (May 2023 - Present)
- Research Assistant for Dr. Maura Grossman:** Conducts research and synthesizes findings into actionable insights on the topic of the creation of synthetic hospital medical data. (Jan 2023 - Oct 2023)