

Thevananthan Thevarasa

AI-ML Engineer | (709) 219 7993 | thevananthan.thevarasa@gmail.com

Enthusiastic and passionate Machine Learning Engineer with Master of AI from Memorial University of Newfoundland having 7 years' experience as an Embedded Software Engineer for Electronics and Automation industry. Eager to leverage analytical skills and technical expertise in a challenging ML engineering Role.

WORK EXPERIENCE

Southern IL Scales Inc, Illinois, USA — [Embedded Software Engineer](#)

Sept 2022 – Present (1Yr 6M – Remote work + On-Site Visits)

Developing Rail Weigh-In-Motion applications for USA Industries: Fairbanks Inc, ITC Terminals, TGM, Nutrien Ag Solutions etc.

Rinstrum Pty Ltd, Brisbane, AU — [Engineering Team Lead](#)

Jan 2021 – Sept 2022 (1Yr 9M – Remote + On-Site Visits)

Managing Sri Lanka Based Engineering Team for Rinstrum, AU. RnD for internal libraries and build environments for firmware dev.

Rinstrum Pvt Ltd, Negombo, SL — [Design Engineer](#)

Jan 2017 – Jan 2021 (4 years)

Embedded software Development for Industrial controllers to automate the Industrial process & controls using Rinstrum products.

EDUCATION

Memorial University of NL, Canada — [Master of Artificial Intelligence](#)

Sept 2022 – April 2024 – Cumulative GPA – 4.0

University of Moratuwa, SL — [PG. Dip. In Electronics and Automation](#)

May 2019 – May 2021 - GPA 3.9 (out of 4.2)

SLIIT, SL — [BSc Eng\(hons\) Electrical and Electronic Engineering](#)

March 2013 - March 2017 - GPA 3.66 (out of 4.0)

AI/ML PROJECTS

Visual Question Answering Chat App — [Capstone, Master of AI](#)

Alzheimer's Disease Diagnosis – [Classification using SVM and K-NN](#)

Predicting likelihood of loan Defaults – [Using Random Forests](#)

Customer Classification Horeca or Retail – [XGBoost + K-Fold-CV](#)

Predicting Compressive Strength of Concrete – [Regression+L1, L2](#)

More ML Projects I have worked on can be found in my [GitHub Repositories](#)

OTHER RESEARCH PROJECTS

“Cost Effective Design and Implementation of Centralized Wireless Network Architecture for Cloud integrated IoT Applications.” – [2020 \(PG. Dip Design Proj\)](#)

“Smart, Easy End-User Installable Node-Coordinator System & Protocol solution for IoT Applications using Cost-Effective Embedded systems” – [2018 \(Tech Paper\)](#)

“Autonomous monitoring of Agriculture Farms, located Remotely from the crop owners, using an Ardupilot (Modified) Quad-copter Drone” – [2016 \(BSc Research\)](#)

WEBSITE

thevananthan.com

GITHUB

<https://github.com/dev-nanthan>

Address: 277A Newfoundland Dr
St. John's A1A 3G2, NL, CA

ML, Vision Frameworks Exp.

- ▶ PyTorch
- ▶ XGBoost
- ▶ Hugging Face
- ▶ scikit-learn
- ▶ OpenCV
- ▶ Keras

PROGRAMMING LANG

Python - Expert Lua - Expert
R - Intermediate C Lang - Expert
JS - Advanced HTML, CSS - Adv
MATLAB – Adv C# - Intermediate

ML Skills Hands on Exp.

- Data Cleaning, Feature Eng.
- Dataset Split: Train, Validate, Test
- K-Fold, LOO Cross-Validation
- Hyper-parameter Tuning
- Optimization: Adam, SGD

AI Academic Exposure

- ML - Supervised
 - Classification, Regression
- ML – Unsupervised
 - Clustering
 - Dimensionality Reduction
- Computer Vision
 - CNN, Vision Transformer
- NLP: LSTM, RNN, Transformers
- Reinforcement Learning

Algorithms Worked-On

- Search: A-star, Mini-Max
- Genetic Algorithm
- RL – Q-Learning, Monte-Carlo
- Shortest Path: Bellman-Ford
- Network Flow: Ford-Fulkerson