

Tamilselvan Subramani

Senior Engineer|ML|DL @Hella

Salem, Tamil Nadu

tamilortan1197@gmail.com

+91 89409 03097

- 3+ years experienced Machine Learning Engineer with proven record success in building successful algorithms and Predictive models for different use cases. Highly adept at clustering, classification, Neural Nets architecture modeling, data analysis & Visualization. Passionate engineer & thriving analyst with the ability to apply ML and DL techniques & algorithm development to solve real-world industry problems.
- Considerably experienced in developing and deploying ML/DL models in Cloud using AWS and in docker using microservices.

Willing to relocate: Anywhere

Personal Details

Date of Birth: 1997-09-11

Eligible to work in: India

Highest Career Level: 2-5 years experience

Industry: Automotive, Software Development

Total years of experience: 4

Work Experience

Machine Learning Engineer

HELLA - Chennai, Tamil Nadu

August 2019 to Present

1. Approaching Technical Components and Transfer Simulation methods with ML-based Approach. Deploying ML apps into Cloud using MLOps methodologies.
2. Developed Digital Twin (DT) for simulation components which follows Navier- Stokes Equation of Heat transfer with multi input multi output Neural network model.
3. Developed a real-time DL application for calculating PWM rate using Temperature, current, and PWM rate. Which takes both video and Binary datas as input and predict the PWM rate. Developed a Mixed input Mixed Output NN model Using Keras and Tensorflow. Also deployed the same over Cloud.
4. ML Application to analyze the fiber orientation with plastic material for Injection Molding simulation. With the data's of fiber orientation on plastic material used clustering methods to find how the fibers are oriented with the Plastic Material.
5. Developed a machine learning ecosystem to advice simulation engineers beforehand of running simulations, which gives an brief insights about the components and their properties which they are going to use .
6. Developed a complete LED calculator with Python ML, which is used in the predevelopment phase for selection of best LED based on Function, PCB, PCB_Material, Driver, Driver efficiency, and other Factors.

7. Optimized the design of Heatsink, PCB, LED and Components by Implementing machine learning in lighting technologies for Thermal management(Analysing Heat transfer from one module to another and the variation of heat transfer coefficient based of surface, materials and other Thermal influencing Factors.

Software Engineer

Logituit - Coimbatore, Tamil Nadu

August 2018 to August 2019

- Hands on Computer Vision and AI/Deep Learning technologies, algorithms, tools, competition,etc.; preference with experience in security & surveillance type use cases (Face, people, object,vehicle, etc.)
- Hands on Deep Neural Networks like CNN, RNN implementation in high level languages/packages using frameworks like Tensorflow and keras also implementing MachineLearning algorithms like Support Vector Machine, Random forest ,Decision trees using Scikit-learn.
- Building Chat bots Using NLP and Machine learning.
- Approaching all business problems with optimised way using machine learning and deep learning.
- Building custom neural networks using Keras and Python

Education

Master's in Computer Science

Birla Institute of Technology & Science - Rajasthan

July 2020 to July 2022

Bachelor's in Computer science

University college of Engineering - Thirukkuvalai - Nagappattinam, Tamil Nadu

July 2014 to April 2018

Saradha Matric & Higher Secondary School

April 2012

Secondary Schooling

Skills / IT Skills

- AWS (1 year)
- C++ (2 years)
- DEEP LEARNING (3 years)
- Tesseract , OpenCV, Google Colab.
- Tensorflow , Keras, NLP ,spaCy, Gensim .
- Ansys spaceclaim (2 years)
- Ansys CFX (2 years)
- Altair Hyperview (2 years)
- Python (4 years)
- Sql (2 years)
- Flask (2 years)

- Java (1 year)
- microservices (1 year)
- Microsoft Azure (2 years)

Languages

- English - Fluent

Online Profile

<https://github.com/Thamizhortan>

<https://stackoverflow.com/users/10159144/tamil-selvan-s>

<https://www.linkedin.com/in/thamizh-selvan-74a9ab103>

Certifications and Licenses

Sun Certified Java Programmer

April 2017 to Present

PROGRAMMING IN C++

March 2016 to Present

PYTHON INTERN

February 2018 to Present

A GENTLE INTRODUCTION TO DEEP LEARNING USING KERAS

January 2019 to Present

DEEP LEARNING PREREQUISITES:THE NUMPY STACK IN PYTHON

April 2019 to Present

Neural Networks and Deep Learning

June 2021 to Present

Projects / Papers Presented

ARTIFICIAL INTELLIGENCE POWERED BANKING CHATBOT

<https://pdfs.semanticscholar.org/14e9/e8a7e98d1d40003bb8f69158ff87b2086478.pdf>

April 2018

Additional Information

Technical SKILLS

- Languages: C++, PYTHON, JAVA, TCL, VBA
- Software: Ansys CFX, CFD_POST, SCDM, Altair HyperView
- Simulation domains: Thermal Management (CFD), Finite element Analysis.
- Cloud Platform: AWS
- Opensource: Tesseract, OpenCV, Google Colab.
- Domains: Deep Learning (CNN, NN, RNN, LSTM)
- Machine Learning (Decision trees, KNN, KMeans, SVM, Linear and Logistic Regression, Random Forest, PCA, etc.,)
- NLP (Topic Modelling, NLTK, Chatbot)
- Frameworks: Tensorflow , Keras, NLP , spaCy, Gensim .
- Database : SQL