SRIKRISHNA IYER

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EDUCATION

Nanyang Technological University, School of Electrical and Electronics

Aug 2019 - Sep 2020

Master of Science (MSc) in Computer, Control, and Automation, 3.04/4.0

- Thesis: Vital signs monitoring using mm-wave radars with machine learning
- _ Advisor: Dr. Muhammad Faeyz Karim

Vellore Institute of Technology, School of Electronics

July 2015 – July 2019

Bachelor of Technology (BTech) in Electronics and communication, 3.52/4.0

- Thesis: Structural health monitoring of railway tracks using IoT-based multi-robot system
- _ Advisor: Dr. Velmurugan T

WORK/INTERNSHIP EXPERIENCE

ST Engineering, Singapore

Sep 2022 – Present

Senior Research Engineer (with Dr. Jinson Xu)

- Assist research leads and scientists in identifying strategic technology gaps across Singapore Technology's business units.
- Currently working on spatio-temporal modeling using graph-based models, computer vision and anomaly detection for defect prediction.

ASMPT Pvt. Ltd. Singapore

Sep 2020 – Aug 2022

R&D Data Analyst I (with Dr. Kar Wai Lim)

- Worked on multimodal temporal models for wire bond equipment quality prediction and anomaly detection.
- Proposed a RUL prediction model using deep learning and survival analysis.
- Proposed an improved representation space for textual corrective actions and time-series signals for a NLP-based corrective action recommender.

NCS pvt. Ltd., Singapore

June 2020 - Aug 2020

Research Intern (with Dr. Leo Zhao)

• Developed a privacy-enabled tracking system using mmWave radars using radar signal processing and machine learning.

Nanyang Technological University, Singapore

Oct 2019- May 2020

Graduate Research Assistant (with Dr. Muhammad Faeyz Karim)

 Worked in the Singtel Cognitive and artificial intelligence lab for enterprises <u>SCALE@NTU</u> towards the development of a non-contact non-invasive radar-based vital signs monitoring and arrhythmia prediction system using machine learning.

National University of Singapore, Singapore

June 2018 - July 2018

Research Intern (with Dr. Harry Nguyen and Dr. Lek hsiang Hui)

 Global Academic internship program on Big Data Analytics using Artificial Neural Networks jointly carried out by Hewlett-Packard Enterprise and Strategic Technology Management Institute at National University of Singapore.

SKILL SUMMARY

Core Skills: Signal processing, Image processing, Machine learning, Deep Learning

Programming: Python (Tensorflow, Keras, numPy, Pandas, OpenCV and scikit-learn), C++, MATLAB, SAS

Tools: SAS Viya, AWS Sagemaker, AWS CodePipeline, AWS CodeBuild, AWS Quick sight, PowerBI

PUBLICATIONS

- mmWave Radar based Vital Signs Monitoring and Arrhythmia Detection using Machine Learning S. Iyer, L. Zhao, M. P. Mohan, F. Zhong, M. Y. Siyal, A. Alphones and M. F. Karim Sensors MDPI 2022
- 2. Structural health monitoring of railway tracks using IoT-based multi-robot systems

S. Iver., Velmurugan, T., Gandomi

Neural Computing & Applications 2020

3. Antlion optimization and Whale optimization Algorithm for multilevel thresholding segmentation S. lyer, A. P. Nadkarni and Padmini T. N

Innovations in Power and Advanced Computing Technologies (i-PACT) 2019

4. Accepted : Support Vector Machine based Spectrum Handoff Scheme for Seamless Handover in Cognitive Radio Networks

S.lyer, Velmurugan T, Prakasam P and Suresh Kumar T R

Concurrency and computation: Practice and Experience

5. *Under review :* Non-Contact Blood Pressure Monitoring System using Dual mm-Wave Radar Sensors with Machine Learning

<u>S. Iyer</u>, L. Zhao, M. P. Mohan, F. Zhong, M. Y. Siyal, A. Alphones and M. F. Karim Scientific Reports

PATENTS

1. *Under review:* Non-Invasive Blood Pressure Monitoring Using Dual mmWave FMCW Radars with Machine Learning

<u>S. Iyer,</u> M.F. Karim, M. P. Mohan, F. Zhong and L. Zhao

(Singapore Patent Application No. 10202009121P)

PROFESSIONAL ACTIVITIES

Advising

Three undergraduate students, Nanyang Technological University Undergraduate Intern, ASMPT Pvt. Ltd.

2019 - 2020

2021 - 2022

EXTRACURRICULAR ACTIVITIES

- Teaching volunteer at the Hope foundation school in bangalore in 2018.
- Student volunteer at the Instrument Society of India (Student chapter at VIT University) in 2017.