

SRITHARAN BRAVEENAN

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[Mail](#) ◊ [LinkedIn](#) ◊ [Website](#) ◊ [GitHub](#)

OBJECTIVE

Enthusiastic and energetic individual with problem-solving and critical-thinking skills, committed team member with excellent communication skills, and leadership qualities. Conducted academic research in the fields of Signal Processing, Autonomous Systems, and Machine Learning. Gained professional experience in Digital System Design, Machine Learning, and Software Development.

WORK HISTORY

Lecturer (Contract) University of Moratuwa	August 2024 - December 2024
Teaching Assistant (Part time) University of Moratuwa	September 2022 - July 2024
Research Assistant University of Moratuwa	May 2022 - July 2024
Software Engineer Axiata Digital Labs (Pvt) Ltd	July 2021 - May 2022
Software Engineer Intern Paraqum Technologies (Pvt) Ltd	August 2019 - December 2019
Software Engineer Intern Wave Computing (Pvt) Ltd	June 2019 - August 2019

EDUCATION

Ph.D. in Computer Science , University of Georgia	January 2025 – Present
M.Sc. (Major Component: Research) , University of Moratuwa Specialized in Computer Science and Engineering Thesis: Unified Voice Embedding for Speaker and Speech Recognition using Deep Learning	August 2022 – August 2024
B.Sc. (Hons) Engineering , University of Moratuwa Specialized in Electronic and Telecommunication Engineering Second Class Upper Division GPA: 3.56 Dean's List in Semester 1, Semester 7, and Semester 8	October 2016 – July 2021

HONORS & AWARDS

• Mahapola Higher Education Merit Scholarship granted by the Government of Sri Lanka	2016 - 2021
• Silver Medalist in Sri Lankan Physics Olympiad	2015
• Credit pass in Australian National Chemistry Quiz Senior Division	2014
• Merit pass in Australian National Chemistry Quiz Junior Division	2012
• Merit pass (Ranked 16) in Sri Lankan Mathematics Junior Challenge Competition	2011

TECHNICAL SKILLS

Languages	Python, MATLAB, Verilog, C++, Java, SQL
Tools	Git, Linux

PROJECTS

Cross View Geo-Localization

2025 – Present

Researching cross-view image matching for localizing ground cameras using aerial or satellite imagery. Focusing on viewpoint-invariant representation learning and robust pose estimation for GPS-denied navigation.

Unified Voice Model

2022 – 2024

Developed a unified model for Speaker, Speech, and Emotion Recognition using Multi-Task Learning (MTL) to learn a shared embedding that captures and separates speaker-, content-, and emotion-related characteristics.

Real-Time Light Field Video Compression using 5-D Approximate DCT

2020

Developed a real-time Light Field Video (LFV) compression system enabling efficient transmission and storage.

Autonomous Inventory Management Drone

2020

Built an autonomous quad-copter-based warehouse inventory system that reduces cost and improves operational efficiency.

OTHER PROJECTS

- COVID19 symptoms detector – Community project 2020
- Custom processor design and implementation to down sample an image - Semester project 2019
- IoT oil lamp – Community project 2018

PUBLICATIONS

wavCSE: Learning Fixed-size Unified Speech Embeddings via Feature-based Multi-Task Learning

Sritharan, B., & Thayasivam, U. (2025, December).

In *Proceedings of the 14th International Joint Conference on Natural Language Processing and the 4th Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics* (pp. 879–887).

SUPERB-EP: Evaluating Encoder Pooling Techniques in Self-Supervised Learning Models for Speech Classification

Sritharan, B., Thayasivam, U., & Bandara, S. J. (2025, March).

In *2025 IEEE Symposium on Computational Intelligence in Natural Language Processing and Social Media (CI-NLPSoMe)* (pp. 1–7). IEEE.

Computationally Efficient Light Field Video Compression Using 5-D Approximate DCT

Sritharan, B., Edussooriya, C. U., Wijenayake, C., Cintra, R. J., & Madanayake, A. (2025).

Journal of Low Power Electronics and Applications, 15(1), 2.

Advancing Multilingual Speaker Identification and Verification for Indo-Aryan and Dravidian Languages

Sritharan, B., & Thayasivam, U. (2025, January).

In *Proceedings of the First Workshop on Natural Language Processing for Indo-Aryan and Dravidian Languages* (pp. 67–73).

PROFESSIONAL EXPERIENCE

- Resource person - Workshop on Sequence-to-Sequence Models in Deep Learning at MERCon 2023 2023

- Resource person - Workshop on Light Field Processing Using Low-Complexity Signal Processing Algorithms and Deep Learning at IEEE EMBS International Student Conference 2021 2021
- Web Master - IEEE Communications Society Student Branch Chapter of University of Moratuwa 2020 - 2021
- Student Coordinator - Tamil Literary Association, University Of Moratuwa 2020 - 2021
- Editor - IEEE Communications Society Student Branch Chapter of University of Moratuwa 2019 - 2020
- Team leader - Archiventure1.0, AIESEC Colombo South 2018
- Resource person - Robotic workshop for school children organized by Electronic Club of UOM 2018
- Student Representative - Dept. of Electronics and Telecommunication Engineering, UOM 2017 - 2018

REFERENCES

Prof. Lakshmish Ramaswamy

Associate Director, School of Computing,
 School of Computing,
 University of Georgia,
 USA
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Dr. Uthayasanker Thayasivam

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