Dulanga Weerakoon

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CONTACT INFORMATION Name: Weerakoon Mudiyanselage Dulanga Kaveesha Weerakoon

Title: Mr.

Office mailing address: Living Analytics Research Centre (LARC), Level 5, School of Information Systems, Management University, 80 Stamford Rd, Singapore 178902

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Contact number: +65 9081 1084

Current position: PhD student (Advisor: Prof. Archan Misra, Co-Advisor: Dr.

Vigneshwaran Subbaraju)

EMPLOYMENT PhD Research Intern

Jan 2023-Apr 2023

HISTORY

Institute of High Performance Computing, A*STAR, Singapore

Advisor: Dr. Vigneshwaran Subbaraju

Research Engineer

July 2018-July 2019

Living Analytics Research Centre (LARC), Singapore Management University

Advisor: Prof. Archan Misra

R&D Engineer

Feb 2018-June 2018

Synopsys, Sri Lanka

Research Assistant

Aug 2016 - Jan 2017

LiveLabs, Singapore Management University

Advisor: Prof. Archan Misra

Visiting Instructor

Mar 2016-Apr 2016

University of Moratuwa, Sri Lanka

ACADEMIC QUALIFICA-**TIONS**

Ph.D. in Computer Science

Singapore Management University Advisor: Prof. Archan Misra

Co-Advisor: Dr. Vigneshwaran Subbaraju

GPA: 3.88

B.Sc. Engineering Honours

2014-2018

2019-Current

University of Moratuwa, Sri Lanka

Major: Electronic & Telecommunication Engineering GPA: 3.61

RESEARCH INTERESTS Human-AI Collaborative Systems, Multi-Modal Sensing, Mobile and Pervasive Com-

puting, Deep Learning in Embedded Systems

PUBLICATIONS Weerakoon, D., Subbaraju, V., Tran, T. and Misra, A., 2023, January. Demonstrating Multi-modal Human Instruction Comprehension with AR Smart Glass. 15th International Conference on COMmunication Systems NETworkS (COMSNETS 2023).

[in press]

Weerakoon, D., Subbaraju, V., Tran, T. and Misra, A., 2022, October. SoftSkip: Empowering Multi-Modal Dynamic Pruning for Single-Stage Referring Comprehension. In Proceedings of the 30th ACM International Conference on Multimedia (pp. 3608-3616).

Weerakoon, D., Subbaraju, V., Tran, T. and Misra, A., 2022. Cosm2ic: Optimizing real-time multi-modal instruction comprehension. IEEE Robotics and Automation Letters, 7(4), pp.10697-10704.

Weerakoon, D., Subbaraju, V., Karumpulli, N., Tran, T., Xu, Q., Tan, U., Lim, JH., and Misra, A., 2020. Gesture Enhanced Comprehension of Ambiguous Human-to-Robot Instructions. In Proceedings of the 2020 International Conference on Multimodal Interaction (ICMI '20).

Abdelzaher, T., Hao, Y., Jayarajah, K., Misra, A., Skarin, P., Yao, S., Weerakoon, **D.** and Årzén, K.E., 2020. Five challenges in cloud-enabled intelligence and control. ACM Transactions on Internet Technology (TOIT), 20(1), pp.1-19.

Yao, S., Hao, Y., Zhao, Y., Piao, A., Shao, H., Liu, D., Liu, S., Hu, S., Weerakoon, D., Jayarajah, K. and Misra, A., 2019, July. Eugene: Towards deep intelligence as a service. In 2019 IEEE 39th International Conference on Distributed Computing Systems (ICDCS) (pp. 1630-1640). IEEE.

Weerakoon, D., Jayarajah, K., Tandriansyah, R. and Misra, A., 2019, July. Resilient Collaborative Intelligence for Adversarial IoT Environments. In 2019 22th International Conference on Information Fusion (FUSION) (pp. 1-8). IEEE.

Misra, A., WEERAKOON MUDIYANSELAGE, D.K.W. and Jayarajah, K., 2019. The challenge of collaborative iot-based inferencing in adversarial settings.

Misra, A., Jayarajah, K., **Weerakoon, D.**, Tandriansyah, R., Yao, S. and Abdelzaher, T., 2019, May. Dependable machine intelligence at the tactical edge. In Artificial Intelligence and Machine Learning for Multi-Domain Operations Applications (Vol. 11006, p. 1100608). International Society for Optics and Photonics.

Jayarajah, K., Subbaraju, V., **Weerakoon, D.**, Misra, A. and Athaide, N., 2017, May. Discovering anomalous events from urban informatics data. In Ground/Air Multisensor Interoperability, Integration, and Networking for Persistent ISR VIII (Vol. 10190, p. 101900F). International Society for Optics and Photonics.

HONORS & AWARDS

2nd place in Kaggle competetion for Product Detection

Hosted by Shopee, Singapore 2nd place out of 646 teams

 2^{nd} place in Kaggle competetion for Sentiment Analysis

Hosted by Shopee, Singapore 2nd place out of 317 teams

Dean's list in Semesters 6 & 8 of B.Sc. degree Semester GPA: 4.00

Winner of Second Prize, Ideasinc startingUp 2016 Hackathon

Organized by Nanyang Technopreneurship Center, Nanyang Technological University, Singapore

CERTIFI-CATIONS

CS50x: Introduction to Computer Science I Offered by HarvardX through edx.org in 2013 **6.002x:** Circuits and Electronics
Offered by MITx through edx.org in 2013

PHYS102x: Electricity and Magnetism Offered by RiceX through edx.org in 2013

EXTRA INTERESTS & AWARDS Team member of SMU Table Tennis Team

Won 2nd place in Institute-Varsity-Polytechnic games (IVP), Singapore.

Team member of University of Moratuwa Table Tennis Team

 $Recipient\ of\ extra-curricular\ colors\ awards$