

Ruwan Wickramarachchi

Ph.D. Candidate, AI Institute, University of South Carolina

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Education

University of South Carolina

Ph.D. in Computer Science

Columbia, SC, USA

August 2019 - Present

Wright State University

MS in Computer Science

Dayton, OH, USA

August 2017 - July 2019

University of Colombo

BS in Computer Science

Colombo, Sri Lanka

Oct. 2009 - Feb. 2014

Work Experience

AI Institute, University of South Carolina

Graduate Research Assistant

Columbia, SC, USA

August 2019 - Present

Bosch Center for AI

AI Research Intern

Pittsburgh, PA, USA

Summers 2019, 2020, 2022

London Stock Exchange Group (LSEG)

Senior Software Engineer (Machine Learning Research Group)

Malabe, Sri Lanka

Feb. 2014 - July 2017

Selected Publications

Complete List

[\[Google Scholar\]](#)

- [1] “A Comprehensive Survey on Rare Event Prediction”, *ACM Computing Surveys (Accepted, to appear)*, 2024
- [2] “A Benchmark Knowledge Graph of Driving Scenes for Knowledge Completion Tasks”, *ISWC*, 2024
- [3] “ANALOGICAL—A New Benchmark for Analogy of Long Text for Large Language Models”, *Findings of ACL*, 2023
- [4] “A Semantic Web Approach to Fault Tolerant Autonomous Manufacturing”, *IEEE Intelligent Systems*, 2023
- [5] “CLUE-AD: A Context-based Method for Labeling Unobserved Entities in Autonomous Driving Data” *AAAI*, 2023
- [6] “Knowledge-Based Entity Prediction for Improved Machine Perception in Autonomous Systems”, *IEEE Intelligent Systems*, 2022
- [7] “Knowledge-Infused Learning for Entity Prediction in Driving Scenes”, *Frontiers in Big Data*, 2021
- [8] “Towards Leveraging Commonsense Knowledge for Autonomous Driving”, *ISWC*, 2020
- [9] “An evaluation of knowledge graph embeddings for autonomous driving data: Experience and practice”, *AAAI-MAKE*, 2020
- [10] “Shades of Knowledge-Infused Learning for Enhancing Deep Learning”, *IEEE Internet Computing*, 2019

Patents

- [1] “System and Method for Knowledge-Based Entity Prediction”, US Patent App. 17/508,227
- [2] “Device and Computer Implemented Method for Explainable Scene Clustering”, US Patent App. 17/939,517
- [3] “System and Method for a Context-Based Method Labeling Unobserved Entities in Sequential Data”, US Patent App. 18/434,027

Volunteer Services

PC Member

ISWC 2021, K-iL 2021, KiML2020, The Web Conference (formally WWW) 2018

Aug. 2017 - Present

Reviewer

TNNLS, CIKM 2020, The Web Conference 2020, ICWSM-18, IEEE Internet Computing, AAAI-2023, ACL 2020

Aug. 2017 - Present

Student Volunteer

The Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI-2020), New York, USA

Feb. 2020

The 61st Annual Meeting of the Association for Computational Linguistics (ACL-2023), Toronto, Canada

July 2023

Tutorials/Workshops Organized

Knowledge-infused Learning for Autonomous Driving (KL4AD) [\[Link\]](#)

Virtual/ Hangzhou, China

The 21st International Semantic Web Conference (ISWC)

Oct. 2022

Knowledge-infused Deep Learning [\[Link\]](#)

Virtual

The 31st ACM Conference on Hypertext and Social Media (HT'20),

July 2020

Hybrid AI for Context Understanding [\[Link\]](#)

Raleigh, NC, USA

The 3rd U.S. Semantic Technologies Symposium (US2TS)

March 2020

Teaching Experience

- [1] Graduate Teaching Assistant, University of South Carolina CSCE 145/146 (Algorithms Design), CSCE 311 (Operating Systems)
- [2] Graduate Teaching Assistant, Wright State University CEG 2350 (Operating System Concepts and Usage)