J. Dinal Herath

Contact Information

Full Name: Jerome Dinal Herath Muthukumaranage
email: jherath1 AT binghamton DOT edu dinalherath.com

Education

State University of New York - Binghamton, NY, USA

Ph.D., Computer Science, August 2017 - Present (GPA: 3.93/4.00)

University of Colombo, Sri Lanka

B.S., Computational Physics (Major), July 2017 (GPA: 3.66/4.00)

Chartered Institute of Marketing(CIM), United Kingdom

Professional Postgraduate Diploma in Marketing, May 2015

St. Joseph's College, Colombo, Sri Lanka

Primary education, Ordinary Levels(O/Ls), Advance Levels(A/Ls), 2011

Research Interests

Real-Time Machine Learning, Adversarial Machine Learning, Privacy and Anomaly Detection

Publications

1. "RAMP: Real-Time Anomaly Detection in Scientific Workflows". By **J. Dinal Herath**, Changxin Bai, Guanhua Yan, Ping Yang, Shiyong Lu. [**Submitted & Under Review**]
2. "SciBlock: A Blockchain-Based Tamper-Proof Non-Repudiable Storage for Scientific Workflow Provenance". By Dinuni Fernando, Siddharth Kulshrestha, **J. Dinal Herath**, Nitin Mahadik, Yanzhe Ma, Changxin Bai, Ping Yang, Guanhua Yan, Shiyong Lu. [**Submitted & Under Review**]
3. "DeepChannel: Wireless Channel Quality Prediction using Deep Learning". By Adita Kulkarni, Anand Seetharam, Arti Ramesh, **J. Dinal Herath**. [**Submitted & Under Review**]
4. "A Deep Learning Model for Wireless Channel Quality Prediction". By **J. Dinal Herath**, Anand Seetharam, Arti Ramesh. In: IEEE International Conference on Communications (ICC-2019).
5. "A Markovian Model for Analyzing Opportunistic Request Routing in Wireless Cache Networks". By **J. Dinal Herath** and Anand Seetharam. In: IEEE Transactions in Vehicular Technology (TVT-2018).
6. "Analyzing Opportunistic Request Routing in Wireless Cache Networks". By **J. Dinal Herath** and Anand Seetharam. In: IEEE International Conference on Communications (ICC-2018).
7. 'Simulation of Symmetric and Asymmetric movement gaits for Lateral Undulation in Serial Snake Robots". By **J. Dinal Herath** and K. Jayananda. In: 2017 International Conference on Computational Modeling & Simulation (ICCMS-2017).
8. "Comparison of Serial and Parallel Snake Robots for Lateral Undulation Motion Using Gazebo". By **J. Dinal Herath** and K. Jayananda. In: 2016 IEEE International Conference on Information and Automation for Sustainability (ICIAfS-2016).

Awards and Scholarships

- Secure and Private AI scholarship Challenge Recipient by Udacity and Facebook. (2019)
- Student travel grant to attend ACM/IEEE Symposium on Architectures for Networking and Communications (ANCS-2018).
- NSF Student travel grant to attend IEEE International Conference on Communications (ICC-2018).
- Winner of Dr. Sarath Gunapala Gold Medal for Computational Physics, University of Colombo, Sri Lanka (2017).
- Recipient of MIND(Munasinghe Institute for Development) Scholarship, Sri Lanka (2015-2016).

Experience

- Graduate Teaching Assistant, Watson School of Engineering & Applied Science, SUNY Binghamton. (Fall-2018, Spring-2019)
- Graduate Research Assistant, Watson School of Engineering & Applied Science, SUNY Binghamton.(Fall-2017, Spring-2018, Summer-2018, Summer-2019)
- Temporary Lecturer, Department of Physics, University of Colombo, Sri Lanka.(2017)

Skills

Programming Skills:

- C, Java, Python, Tensorflow, PyTorch, Solidity, Matlab,

Modeling Skills & Platforms:

- Markovian Models, Deep Learning, Ethereum-Blockchain, Mathematical Modeling