RESEARCH HIGHLIGHTS

The Department of Computer Science at Lakehead University is a fast growing department with 9 full-time faculty members and over 350 undergraduate and graduate students. The faculty members of Computer Science actively undertake leading-edge research over a broad spectrum of Artificial Intelligence, Data Analysis, Internet of Things, Cyber Security, Communications and Networking, Health Informatics, Game Programming, Computer Vision and Machine Learning.

FACULTY RESEARCH PROFILES

Ruizhong Wei, PhD
Professor, Chair of Department of Computer Science
Fellow of ICA (Institute of Combinatorics and its Application)
Research supported by NSERC 2001-current
Research interests: Cryptography, Network Security, Combinatorics and its Applications in Computer Networks, Coding Theory
Current research projects: Combinatorial methods in coded caching schemes, Key distribution

Jinan Fiaidhi, PhD, PEng
Professor
Research supported by NSERC, CFI, and TBRHSC
Research interests: Mobile, Cloud Computing and Ubiquitous Learning, Social Networking and Crowdsourcing Programming, Machine Learning, Context Aware and Semantic Web, Cyber Physical Systems and IoT, Web Mining, Analytics and Frameworks, Health Informatics and Smart Health

Sabah Mohammed, PhD, PEng
Professor
Research supported by NSERC, CFI, Northern Heritage, and TBRHSC
Research interests: Smart Reactive Systems, Extreme Connectivity, Extreme Automation, Extreme Environments, Autonomous Systems, Mobile Agents, Web Intelligence, Stream based Analytics, Gamification, Simulation and Visualization, NLU

Hosam El-Ocla, PhD, PEng
Associate Professor
Research supported by NSERC
Research interests: Computational Electromagnetics, Computer Networks and Applications, Information Systems and Technology, Internet of Things (IoT)
Current research projects: Radar sensor networks and systems, health informatics

Vijay Mago, PhD
Associate Professor, Graduate Coordinator of MSC Program
Research supported by NSERC 2016-current, SSHRC 2015-current, ONCAT 2016-current and MITACS 2017-current
Research interests: Data Analytics, Medical Decision Making, Simulation and Modelling
Current research projects: Real-time analysis of social data, Modelling of homelessness in Montreal and Ottawa, Semantic similarity of learning outcomes, and Using voice enabled devices to support human activities

Zubair Md. Fadlullah, PhD
Assistant Professor, Research Chair of TBRHRI
Research supported by TBRHRI 2018-current and Lakehead University 2018-current
Research interests: Ad Hoc and/or Sensor Networks, Network Security, Game Theoretic Applications for Communication Networks, Next Generation Internet, Contents Delivery Systems, Protocol Designs, Network Architectures, Satellite Communications, Smart Health

Salimur Choudhury, PhD
Assistant Professor
Research supported by NSERC 2018-current and NOAMA 2018-current
Research interests: Combinatorial Optimization, IoT, Next Generation Cellular Networks
Current research projects: Resource allocation algorithms for next-generation cellular networks, Scheduling algorithms, Clustering algorithms, Crowdsensing

Shan Du, PhD
Assistant Professor
Research supported by Lakehead University 2018-current
Research interests: Computer Vision, Image/Video Processing, Video Surveillance, Machine Learning, Biomedical Image Processing
Current research projects: Multi-object tracking, Virtual reality/augmented reality, 3D denoising of video, Video deburring, 3D medical image reconstruction

Yimin Yang, PhD
Assistant Professor
Research supported by Lakehead University 2018-current
Research interests: Machine Learning, Artificial Neural Networks, Signal Processing
Current research projects: Deep learning, Unsupervised learning, Feature learning and representation, Image processing, Extreme learning Machine and kernel methods, Pattern recognition

* Please contact Dr. Salimur Choudhury (schoudh1@lakeheadu.ca) for funding opportunities.