



The School of Computer Science consists of 23 faculty members who have 45 M.Sc. and 17 Ph.D. students under their supervision. We have a long history of conducting interdisciplinary research, as clearly reflected in the emphasis of our Ph.D. program. Listed below are the main research areas of our faculty along with the specific highlights for the related faculty members.

Artificial Intelligence / Machine Learning (D. Calvert, A. Hamilton-Wright, S. Kremer, P. Matsakis, F. Song, D. Stacey, F. Wang, and Y. Xiang)

- Information Retrieval and Natural Language Processing
- Uncertainty Management, Bayesian Networks, and Fuzzy Set Theory
- Artificial Neural Networks and Deep Learning Models
- Computer Vision and Image Analysis
- Intelligent Tutorial Systems
- Decision Exploration, Support, and Confidence

Data Science (L. Antonie, D. Calvert, D. Chiu, R. Dara, D. Gillis, G. Grewal, A. Hamilton-Wright, P. Matsakis, B. Nonnecke, C. Obimbo, F. Song, and D. Stacey)

- Data Integration and Mining
- Big Data Analysis
- Information Visualization
- Classification and Clustering Analysis
- Privacy Policy Analysis

Human Computer Interaction (D. Gillis, J. McCuaig, B. Nonnecke, S. Scott, and M. Wirth)

- Usability and User Analysis
- Lurker Identification and Ranking
- Interface and Interaction Design

Bioinformatics (D. Chiu and S. Kremer)

- Bimolecular and Biosequence Analysis
- Prediction Algorithms and Time Series Analysis
- Pattern Induction and Recognition

Applied Modeling and Theory (D. Calvert, F. Hussain, P. Matsakis, B. Nonnecke, C. Obimbo, and J. Sawada)

- De Bruijns Sequences, Gray Codes, and Graph Theory
- Intrusion Detection and Cryptography
- Modeling (Spatial, Temporal, Agricultural, Ecological, Health, Music)
- Internet of Things, Smart City, and Smart Transportation

Hardware and Distributed Systems (W. Gardner, G. Grewal, and X. Li)

- Routing and Placement
- Reconfigurable Computing
- Intelligent Mobile Agents
- Design Automation for Embedded Systems
- Hardware and Software Co-design