David R. Cheriton School of Computer Science

The University of Waterloo's David R. Cheriton School of Computer Science is the largest academic concentration of computer science researchers in Canada. We have more than 100 faculty members, 60 administrative, instructional and technical staff, 4,000 undergraduate students and 450 graduate students.

Our CS research areas

- Algorithms and complexity
- Artificial intelligence and machine learning
- Bioinformatics
- Computer algebra and symbolic computation
- Computer graphics
- Cryptography, security, and privacy
- Data systems
- Formal methods
- Health informatics
- Human-computer interaction
- Programming languages
- Quantum computing
- Scientific computation
- Software engineering
- Systems and networking
- Theoretical neuroscience

Our new faculty members

Matt Brehmer
HCI and data visualization; ubietous information experiences

Anamaria Crisan
Human-centred AI and ML; interactive visualization systems; data science in healthcare, public health and biomedicine

Yuntian Deng
Natural language processing and machine learning

Xiao Hu
Database theory and its applications to practical database systems

Renée J. Miller
Canada Excellence Research Chair in Data Intelligence
Data systems, in particular data integration

Freda Shi
Computational linguistics and natural language processing

Victor Zhong
Machine learning, natural language processing, reinforcement learning and AI

Our highlights

Cheriton School of Computer Science, top-ranked CS program in Canada for fourth year in a row
2024 Maclean's University Rankings

Cheriton School of Computer Science, 21st CS program internationally
2024 Quacquarelli Symonds World University Subject Rankings

N. Asokan
Fellow of the Royal Society of Canada

Shai Ben-David, Ian Goldberg
ACM Fellows

Jo Atlee
Lifetime Achievement Award, CS-Can | Info-Can

Ming Li
IEEE Computer Society W. Wallace McDowell Award

Craig S. Kaplan and international colleagues
Aperiodic monotile, TIME's 2023 Best Inventions

M. Tamer Özsu
- *IEEE TCDE Education Award*
- *ACM Presidential Award*

Ihab Ilyas
IEEE Canada C.C. Gotlieb Computer Award

Daniel Vogel
ACM Distinguished Member

Md. Faizul Bari, Arup Raton Roy, Shihabur Rahman Chowdhury, Qi Zhang, Mohamed Faten Zhani, Reaz Ahmed, Raouf Boutaba
2024 CNOM Test of Time Paper Award

Gautam Kamath and international colleagues
- *Caspar Bowden Award for Outstanding Research in Privacy Enhancing Technologies*
- *Best Paper Award, ICML 2024*

Nikhita Joshi, Daniel Vogel
Best Paper Award, CHI 2024

Xinyu Shi, Jian Zhao, Yinghou Wang, Yun Wang
Best Paper Award, CHI 2024

Vasisht Duddu, Sebastian Szyller, N. Asokan
Distinguished Paper Award, PLDI 2023

Jo Atlee, Rungroj Maipradit, Joy Idialu, Noble Saji Mathews, Mei Nagappan
ACM SIGSOFT Distinguished Paper Award, MSR 2024

Raouf Boutaba
Inaugural Rogers Chair in Network Automation

Yaoliang Yu
Ontario Early Researcher Award

Damien Masson
- *Prix de thèse L'Association Francophone de l'Interaction Humain-Machine Dissertation Award*
- *Bill Buxton Award for Outstanding Doctoral Dissertation in Human-Computer Interaction*

Andrew Qi Tang, Ramazan Rakhmatullin, Kevin Wan
Eighth globally (silver medallists), first in North America, 47th ICPC World Finals

UNIVERSITY OF WATERLOO

FACULTY OF MATHEMATICS
DAVID R. CHERITON SCHOOL OF COMPUTER SCIENCE