

Department of Computing Science

Unique Offerings

Founded in 1964, the Department of Computing Science at the University of Alberta is the oldest and one of the largest computing science departments in Canada.

Certificate in Computer Game Development

An optional embedded certificate intended to complement studies with courses that give opportunities to work in multidisciplinary teams, build complete small to medium-scale games and interact with industry.

Certificate in Applied Data Science

Designed for students from various disciplines, this optional embedded certificate focuses on fundamentals and applications of data science, and culminates in a multidisciplinary capstone project.

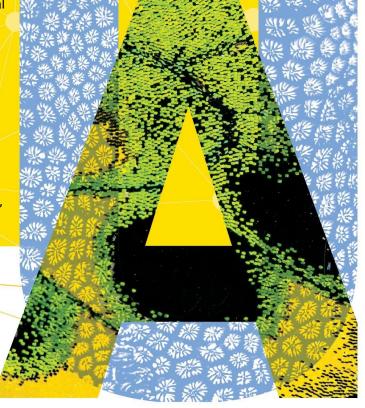
Alberta Machine Intelligence Institute

Internationally recognized for advancing machine learning and data mining research as well as ranking **2nd in North America** for artificial intelligence research.

Additional **undergraduate research** opportunities exist in various areas, such as games, human-computer interaction, natural language processing, optimization, and systems.



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Undergraduate Programs

Computing scientists invent solutions that drive our world. A discipline that has grown at an unprecedented speed, it continues to evolve each day both in foundations and applications.

COMPUTING SCIENCE - BSc Major/Minor | BSc Honors

Flexible programs allow students to choose either a broad or intense focus on the core aspects of computing science, as well as explorations of interdisciplinary connections with other fields.

SOFTWARE PRACTICE - BSc Major | BSc Honors

Designed for students who are interested in all aspects of building software, this program has a broad range of courses to develop depth in programming, algorithms, hardware, software design, user interfaces, project management, and business issues.

ARTIFICIAL INTELLIGENCE - BSc Major | BSc Honors

For students curious about artificial intelligence, this program includes foundations in machine learning, reinforcement learning, search, and ethics, as well as applications such as robotics, games, visual recognition, and natural language processing.

Possible Careers

Our graduates are routinely recruited by top companies including Amazon, BioWare, Dell EMC, Electronic Arts, Google, Intuit Canada, Jobber, Microsoft, and Telus. Examples of current and future careers include:

- Animator
- Application Analyst / Developer
- Artificial Intelligence Specialist
- Computer Programmer
- Corporate Security Specialist
- Data Scientist
- Database Developer

- Game Developer
- Mobile Applications Developer
- Network Administrator / Analyst
- Research Analyst
- Video Game Designer
- Web Developer



For admission requirements: ualberta.ca/admissions

For admission related questions: science.recruiting@ualberta.ca