

DEPARTMENT OF COMPUTING SCIENCE

UNDERGRADUATE STUDIES

OVERVIEW

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.

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. WE HAVE AN INTERNATIONAL REPUTATION FOR BOTH FOUNDATIONAL AND APPLIED CONTRIBUTIONS IN MANY FIELDS OF COMPUTING.

DEGREE PROGRAMS

Flexible programs allow students to choose their program of study that range from an intense focus on the core aspects of computing science, to explorations of interdisciplinary connections with other fields.

COMPUTING SCIENCE - SPECIALIZATION

This flexible program is for students who want to pursue a concentrated study of computing science, or combine the study of computing science with almost any other field.

BUSINESS MINOR

This degree is ideal for students interested in a career that combines computing science and business. Computing is crucial for a business' competitive advantage, and a strong computing science background gives you a better idea of how computing can address business needs.

SOFTWARE PRACTICE

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.

COMPUTING SCIENCE - HONORS

This program is for exceptional, highly self-motivated students. It is very flexible, and can serve as excellent preparation for graduate studies. You must be comfortable with mathematics, be able to communicate well, and enjoy challenges and intellectual risk.

See ualberta.ca/admissions for admission requirements.

RESEARCH AREAS

- + Advanced Man-Machine Interfaces
- + Algorithmics
- + Artificial Intelligence
- + Bioinformatics
- + Communication Networks
- + Computer Games
- + Computer Graphics
- + Computer Vision & Multimedia Communications
- + Database Systems
- + Machine Learning
- + Reinforcement Learning
- + Robotics
- + Software Engineering
- + Software Systems

CAREERS

The computing science industry is growing dramatically. Our graduates enjoy successful careers at many organizations, including Amazon, BioWare, Dell EMC, Electronic Arts, Google, IBM, Intuit Canada, Jobber, Microsoft, Syncrude, and Telus.

Examples of current and future careers in computing science:

- + Animator
- + Application Analyst / Developer
- + Artificial Intelligence Specialist
- + Communications Control Technician
- + Computer Programmer
- + Corporate Security Specialist
- + Data Scientist
- + Database Developer
- + Game Developer
- + Help Desk Analyst

- + Mobile Applications Developer
- + Network Administrator / Analyst
- + Operations Manager
- + Research Analyst
- + Robotics Engineer
- + Software Engineer
- + Systems Analyst
- + Systems Engineer
- + Video Game Designer
- + Web Developer

“Working as a Software Developer Intern has given me invaluable experience tackling real-world problems and creating software that is actually used by others. I am on a fantastic team and work on the same tasks as any other developer. I learn so much every day and feel much more prepared for my career after graduating.”

SHAWNA DAWSON

THIRD YEAR COMPUTING SCIENCE STUDENT CURRENTLY WORKING AT INVIDI

For more information on the programs and opportunities in Computing Science, visit: uab.ca/cs

CONTACT

For admission related questions, contact science.recruiting@ualberta.ca.

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UNIVERSITY OF ALBERTA
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