

Key Sector – ICT

Edmonton’s Expertise

Machine Intelligence, Data Analytics

Selling Points for Edmonton

Specialities in Machine Intelligence: Edmonton plays an important role in the research and development of Machine Learning and Artificial Intelligence (together known as Machine Intelligence) in Canada. The city is home to the Alberta Machine Intelligence Institute (AMII), which helps further research in this innovative field of ICT. In addition, the University of Alberta’s Department of Computing Science has been conducting ground-breaking research in the field, which has been catching global attention.

Low Labour Costs: ICT labour costs are lower in Edmonton than major ICT markets in the USA as well as most major cities in Canada.

Easy Access to Major ICT Hubs: Edmonton has easy access to major ICT hubs in North America, with direct flights to Denver, Houston, and Seattle. In addition, the city is in Mountain Time Zone, making it an ideal location when connecting to both the working hours of the east and west coasts.

Tax Incentives: There are tax credits available for those interested in investing in the ICT sector as well as those interested in research and development activities for ICT.

Neato Facts/Stat

- The first computer Go (a Chinese board game) program, capable of professional-level play, was designed by University of Alberta computer scientists in 2016. This program, titled AlphaGo, was created as part of Google’s DeepMind division.

Comparison to Major Centres

Business Cost Comparison Ranking for Digital Services					
(Higher Rank = Lower Cost)					
Cost	Edmonton	Calgary	Vancouver	Toronto	Montreal
Labour	2	5	1	3	4
Facility Lease	4	2	5	3	1
Taxes	5	3	4	4	1
Utilities	4	3	1	5	2
Overall Rank	5	4	3	2	1

Source: KPMG Competitive Alternatives, 2016

Industry Players

Bioware: Bioware develops high-quality console, PC, and online role-playing games focused on rich stories, unforgettable characters, and vast worlds to discover. Bioware has created some of the world’s most critically acclaimed titles, including Baldur’s Gate, Neverwinter

Nights, Star Wars, Knights of the Old Republic, Jade Empire, Mass Effect, and Dragon Age. Bioware was founded in 1995 by University of Alberta graduates Ray Muzyka, Greg Zeschuk, and Augustine Yip. In 2008, Bioware was acquired by Electronic Arts, a leading global interactive entertainment publisher, however the company's headquarters remains in Edmonton.

Darkhorse Analytics: Darkhorse Analytics is an Edmonton-based company that specializes in analyzing and visualizing complex data. They use data to identify new opportunities, algorithms to increase efficiency, and visualizations to aid decision making. Darkhorse Analytics was founded in Edmonton in 2008 by Daniel Haight and Joey Cherdarchuk. The company is headquartered in Edmonton.

Granify: Granify provides a Software as a Service (SaaS) solution that enables online retailers to maximise their sales by using cutting edge big data and machine learning technologies. Granify's platform analyzes everything from the shopper's journey and pathway to their smallest mouse movements and hesitations. It monitors over 400 attributes per second to fully understand their digital body language and predict their next move. Granify was founded in Edmonton in 2011 by Jeff Lawrence. The company is headquartered in Edmonton.

Major Organizations & Assets

Alberta Innovates – Technology Futures: Tech Futures helps technical industries find solutions, develop products and move technologies to market. It's building on Alberta's already established advantage in platform technologies - like nanotechnology, information communications technologies, and genomics - to enhance the technical capacity within Alberta's high-tech companies. It's facilitating access to the strengths of key partners that help support commercialization and grow new ventures. It's investing in and attracting research and entrepreneurial talent who can support these priorities.

Alberta Machine Intelligence Institute (AMII): AMII works to enhance knowledge and accelerate innovation in the fields of machine learning & artificial intelligence, together called machine intelligence. Through world-class research and development, our team of experts advance academic understanding and provide data-driven solutions to the toughest problems facing businesses in Alberta and beyond.

Department of Computing Science at the University of Alberta: The department has made many contributions in the fields of computing including artificial intelligence, robotics, and software engineering. Areas of research in the department include advanced man-machine interfaces, algorithmics, artificial intelligence, bioinformatics, computer games, computer graphics, database systems, machine learning, reinforcement learning, robotics, software engineering, and software systems.

Startup Edmonton: Startup Edmonton is an entrepreneurial campus and community hub. They connect entrepreneurs and product builders with skills, community, and space to support them as they take ideas to reality. Since 2009, they have created collisions – between developers, designers, makers, founders, investors and mentors – transforming ideas into companies.

TEC Edmonton: TEC Edmonton, a joint venture between the University of Alberta and Edmonton Economic Development Corporation, fosters commercialization of technology research and brings the results of innovation to the benefit of Albertans.