



Canadian AI Ecosystem 2018

With last year's [Canadian AI Ecosystem report](#), we aimed to test our hypothesis that the Canadian AI Ecosystem is larger than it is often represented. Since then, we have already seen a 28% increase in the number of active AI-related startups in Canada. We want to continue to shed light on the burgeoning Canadian AI Ecosystem with an updated report that delves into a little more detail.

This report is the result of a broad collaboration. Great people from Consider Canada, Real Ventures, Invest Canada, and ISDE Canada, have provided us with a huge amount of data. We also aggregated data from Crunchbase, Angel.co, CBInsights, Tracxn, and Pitchbook. With the treasure trove of data we ended up with, it was only a question of doing some cleaning, organising it, some analysis work to identify the trends, and showing it to the world.

We hope to show how the work of so many dedicated actors across the ecosystem has paid off, and we aim to give more visibility to the ecosystem as a whole.

A Few Missing Names

Some of the maps, research labs in particular, will be missing logos as we could not find a logo for some of the organizations. If you don't see your logo, please fill out [this form](#).

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Canadian AI Ecosystem 2018

ELEMENT AI

Startups & Enterprises

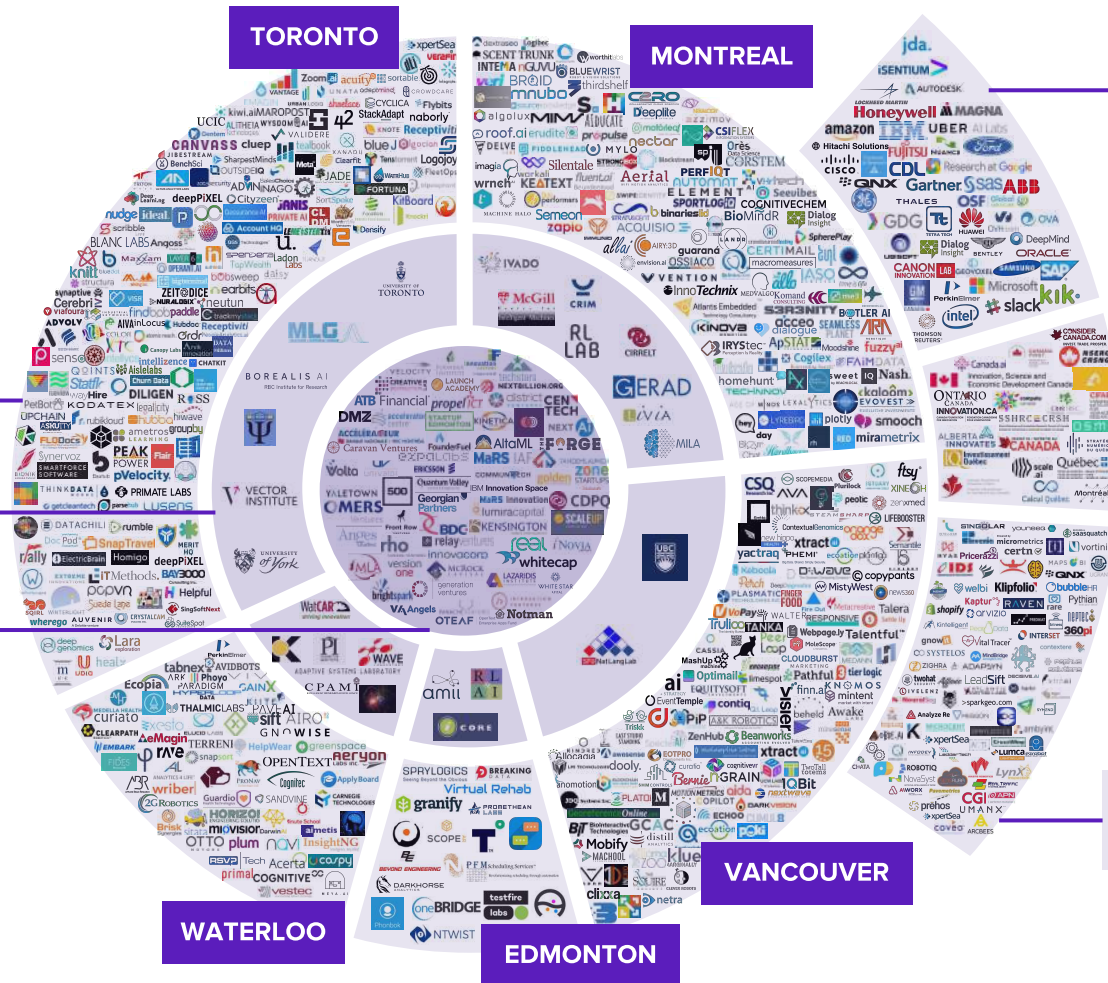
Academic Labs

Incubators, Accelerators
& VC (Pan-Canadian)

International Players in
Canada (Pan-Canadian)

Public &
Non-Profit

Startups & Enterprises
(Outside of Cluster Cities)



Canadian Ecosystem

Ecosystem in numbers

650+ Startups

60+ Investor groups

40+ Accelerators & Incubators

60+ Public research labs

Vancouver



Edmonton



Waterloo



Toronto



Ottawa



Quebec



Montreal



A Growth Ecosystem

There were many interesting findings about the Canadian Ecosystem as a whole; the number of AI-related startups and enterprises is on the rise, as are deals and funding to back them. The talent pool is still going strong, but new challenges are arising.

Startups & Enterprise

From 2017 to 2018, there was a **28% increase in the number of active AI-related startups**, with close to **650 active startups across all cluster cities**.

The last few years have also seen a sharp increase in the number of large international players setting up their labs in Canadian cities. In particular, the main cluster cities (Montreal, Toronto, Vancouver) have seen pillar companies (e.g. Google, Uber, Facebook) setting up research groups, adding to already very active research communities.

The last year in particular has been notable in this regard. Our census of international actors for early 2017 gave us an estimate of around **20 large international actors**, while this year we estimate the number to be closer to **50**.

A Growth Ecosystem

Investments

On average, the last 5 years (as of Q1 2018) saw a **49% increase in AI-related deals**.

The nature of these deals is evolving. **Venture/Angel-backed deals have dropped from 55% in 2013 to 36% today.** Meanwhile, corporate actors have doubled their number of deals, and accelerators/incubators have tripled their number of deals.

Canadian investors sign most of these deals (62%), and international investors have kept a stable share of about 40% across the last five years.

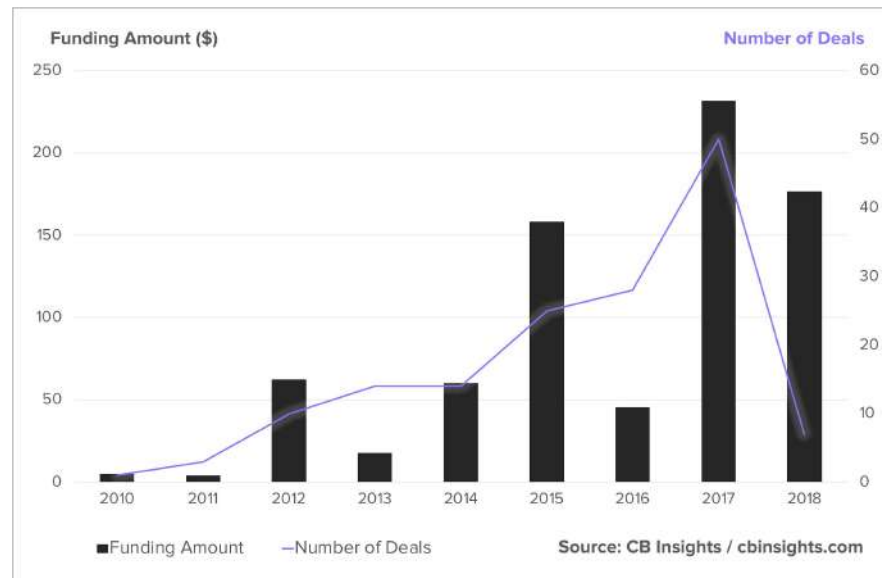
Continued funding from local investors has kept powering the startup community and has built up credibility to the ecosystem, making it a prime target for international investors. This is evidenced by the **multiple \$100M+ deals** that have happened in the last few years.

A Growth Ecosystem

Investments

We can also see that the **number of acquisitions is on the rise by an average of 50%** in the last five years, and they are made mostly from international actors (Silicon Valley being where most of them originate from).

The trend toward continued acquisition and international investment tells us that startups are continuing to attract international attention, and thus that our thesis established last year is confirmed: the ecosystem is moving from being in an activation phase towards being in a globalization phase (or expansion for the bigger cluster cities).



A Growth Ecosystem

Funding

When we compare the Canadian AI Ecosystem to similar ecosystems such as France, England and East Coast US (we've excluded Silicon Valley from this comparison because it is its own beast in terms of sheer scale), one of the biggest differentiators is the way in which the government supports the innovation needed to propel the ecosystem through continued funding.

This is why some of the most significant advances in ML research have come from Canadian universities, and why some of the best research labs in the world call Canada home.

With the latest announcement of **\$4B in science funding for the next several years**, we're sure to see a continued influx of quality research coming from AI research labs. This research breeds continuous innovation which is crucial to fuelling the emerging markets of the AI industry.

A Growth Ecosystem

Talent

The continuous support to public research labs also sheds light on why the Canadian AI Ecosystem has one of the biggest talent pools in the world. When compared to other national ecosystems, Canada hosts the **third largest number of AI experts.**

We see that the growing number of accelerators and incubators associated directly with university campuses has had a strong impact in encouraging ambitious new talent to launch their startups close to home. Waterloo is a good example of a success story on this front, with **35% of their startups being born of those collaborations.** Edmonton has followed a similar trajectory and has seen the most significant growth in the number of startups in the last year.

A Growth Ecosystem

Talent

In other words, collaboration between universities (as talent and innovation generators) and startups/enterprises makes for stronger ecosystems that are better capable of resisting the talent pump of Silicon Valley.

Though this pipeline between academia and businesses has strengthened and the brain drain is consequently slowing, other challenges are increasingly putting pressure on the talent pool.

While the growing number of startups (and average number of employees) seems to be growing at a manageable rate, large international players coming into cluster cities are adding pressure by competing for that same talent, and ultimately keeping the talent gap open.

A Growth Ecosystem

In Closing

All these observations, especially coupled with the boom in international actors setting up shop, indicate that the Canadian AI Ecosystem is succeeding at resisting the trap of being a “natural resource pool” for bigger ecosystems which was the biggest historical challenge of the ecosystem.

As AI-related startups in large cluster cities become more mature and stable, so too should the ecosystem’s ability to resist the historic brain drain. What is less certain is how the ecosystem will react to large actors applying a strong pressure on the talent pool locally, and this should be the most important challenge to face in the year ahead.

Edmonton AI Ecosystem

20+ Startups

11 Investor Groups

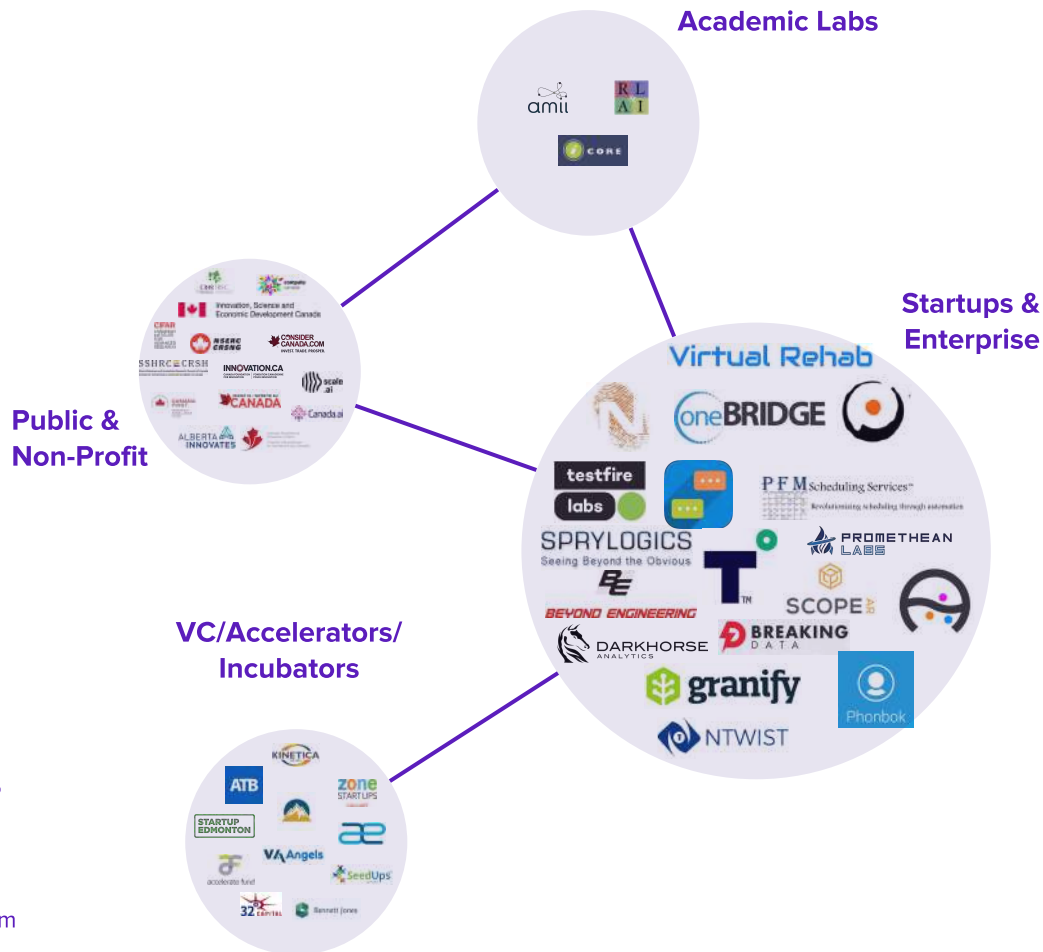
6 Accelerators/Incubators

5 Public Research Labs

The Alberta Machine Intelligence Institute (AMII) acts as a strong core for the community

Investor groups, accelerators, and incubators provide well-structured support for startups

The relatively nascent Edmonton AI Ecosystem is depending on strong research to give birth to innovative startups. This effort is supported by generous funding and resources, and a strong will to diversify the local economy. The presence of Deepmind is a good example of the double edged potential of large actors, as it is not certain that the ecosystem can sustain such an actor and have room to grow.



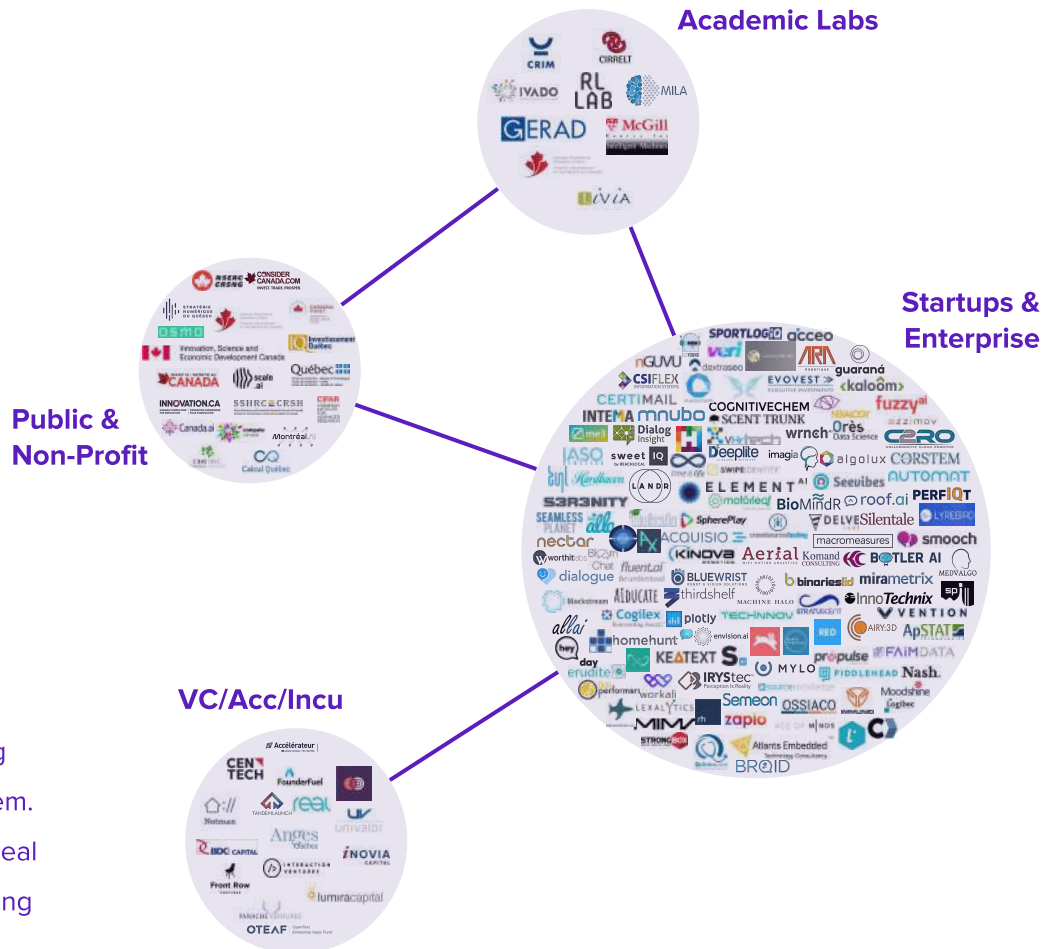
Montreal AI Ecosystem

120+ Startups
14 Investor Groups
7 Accelerators/Incubators
14 Public Research Labs

The presence of MILA & IVADO assure a strong research capacity and international reach

Influx of international actors flocking to Montreal show the success of the ecosystem

While Montreal may not have the largest number of startups, the size of deals and generous research funding position the city as a strong pillar of the national ecosystem. The influx of international actors setting up shop in Montreal demonstrates that the ecosystem is well on its way to being one of the central AI hubs in the world.



Ottawa AI Ecosystem

35+ Startups

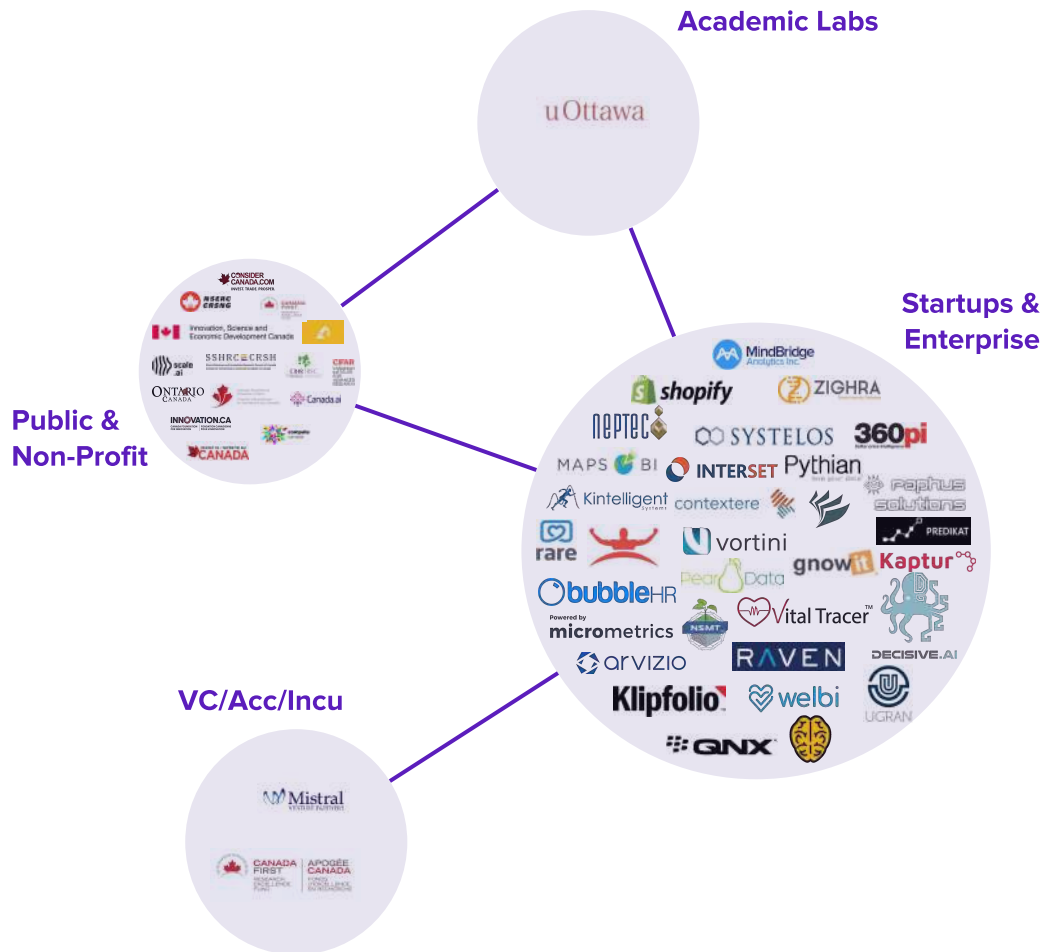
2 Investor Groups

2 Accelerators/Incubators

3 Public Research Labs

Twin pillars of Shopify and Federal Government are the structuring forces of the tech sector on which the Ottawa AI Ecosystem sits and depends.

Ottawa is a distinctive market given its access to the international market through the embassies present. The federal government generously pours money into private sectors, which makes for a stable but not very dynamic environment.



Quebec City AI Ecosystem

20+ Startups

2 Investor Groups

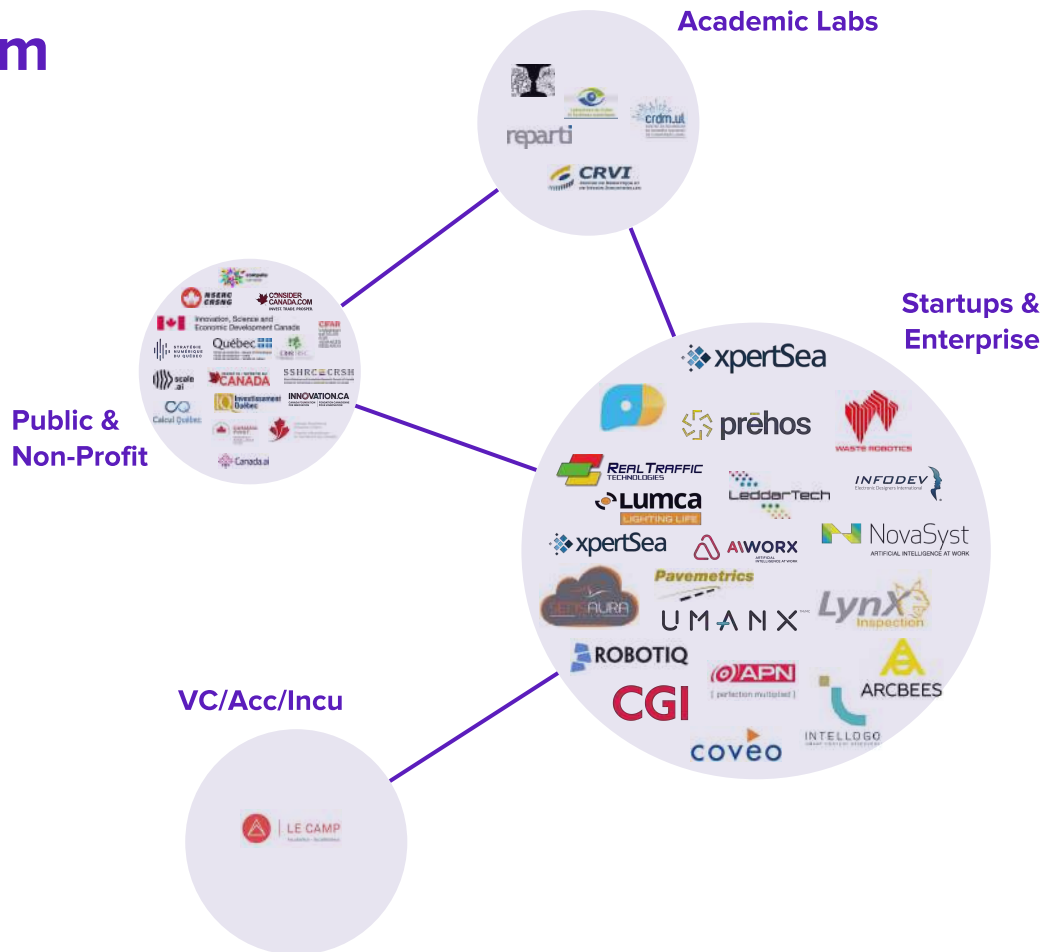
1 Accelerator/Incubator

7 Public Research Labs

Laval University assures a solid output of talent into the ecosystem

Quebec cities tech-sector is well-established assuring a solid foundation for the AI Ecosystem

The University of Laval in Quebec City and its affiliated research labs foster a solid community of AI talent, which meshes with the already-established tech ecosystem. However, compared to the rest of Canada, Quebec City sees a lack of specialized support for AI startups.



Toronto AI Ecosystem

210+ Startups

13 Investor Groups

6 Accelerators/Incubators

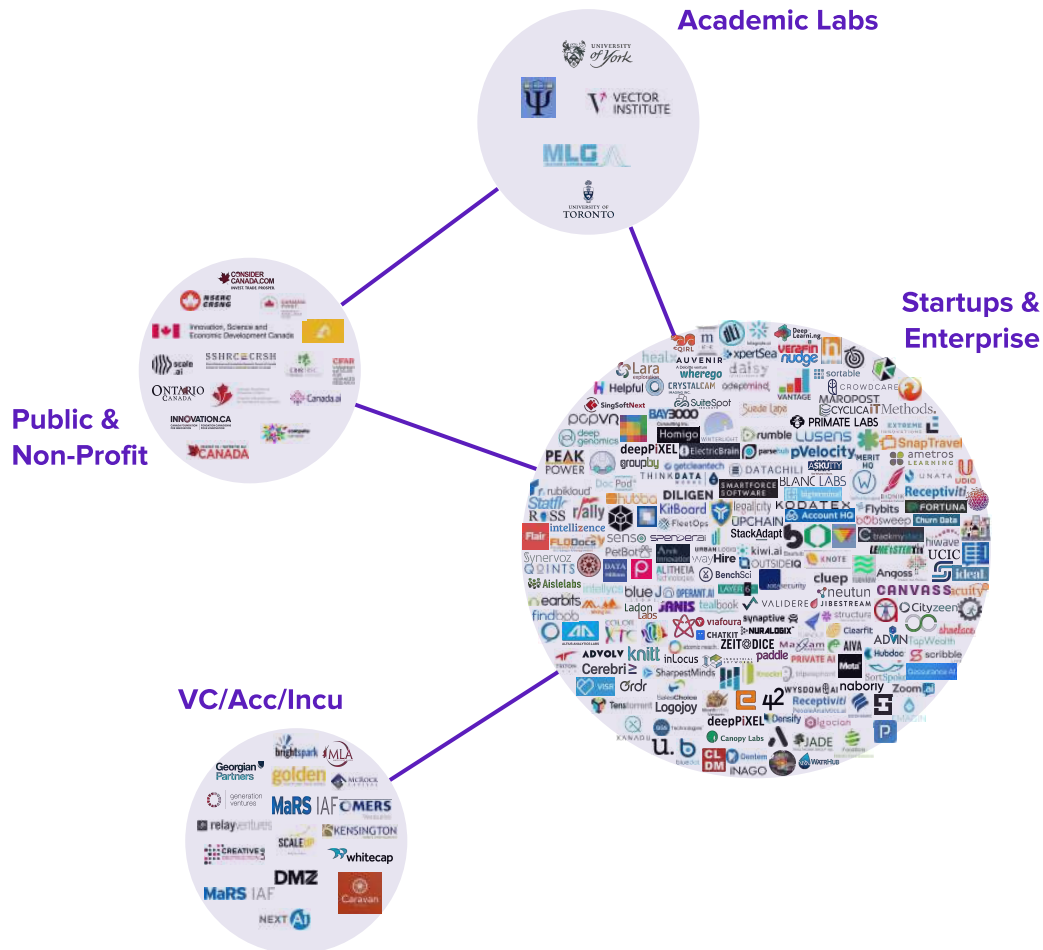
10 Public Research Labs

The presence of Vector Institute sets up Toronto as one of the main pillars of the overall ecosystem

Toronto's strong business community assures a strong support system for startups

Toronto's biggest advantage is in its strong financial sector, which enables a very active startup space.

Organizations like Vector Institute also ensure that the pipeline between universities and the marketplace is well connected.



Vancouver AI Ecosystem

130+ Startups

4 Investor Groups

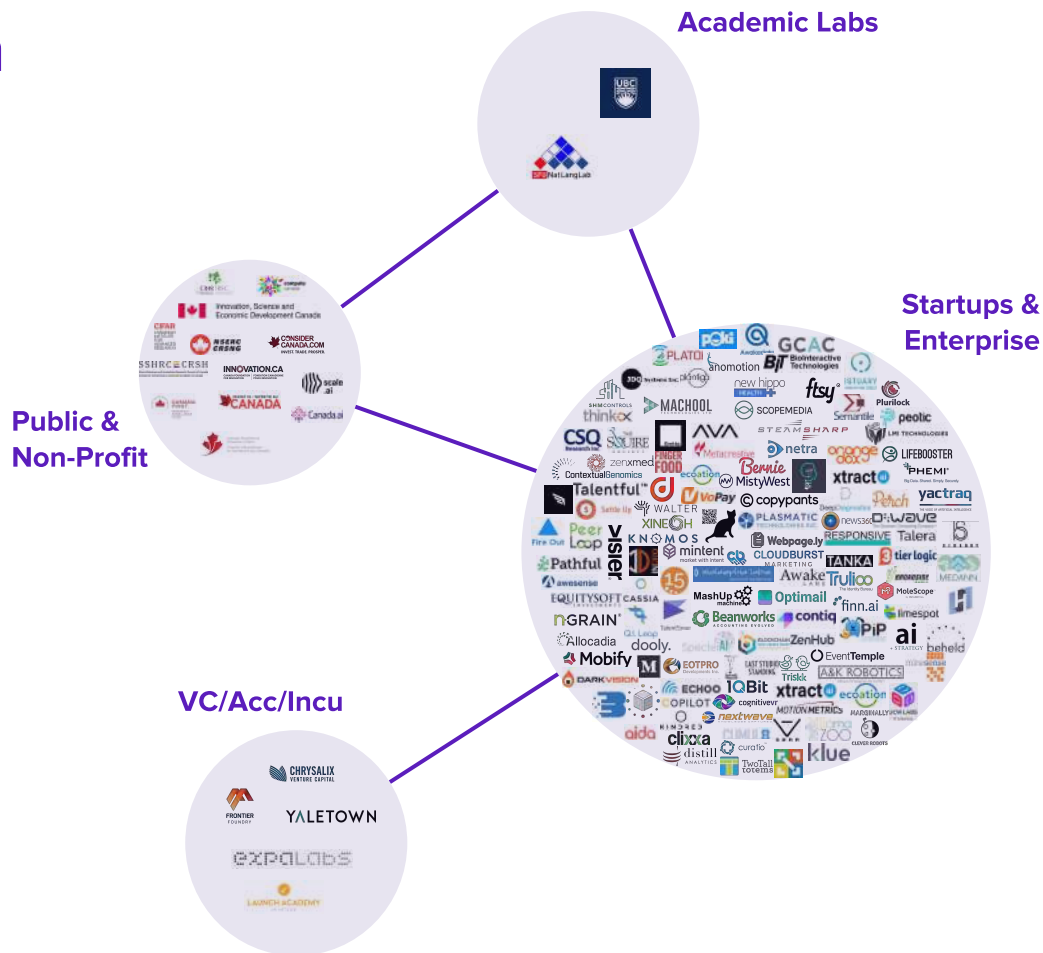
4 Accelerators/Incubators

4 Public Research Labs

The city has an overactive startup scene that can also be seen in the AI space

Vancouver has the best access to asian market in Canada

Vancouver ranks among some of the top startup cities in the world (Startup Compass), and has a proven history of success in the tech sector. Still, in comparison to other Canadian cities, Vancouver lags behind in research.



Waterloo AI Ecosystem

65+ Startups

2 Investor Groups

3 Accelerators/Incubators

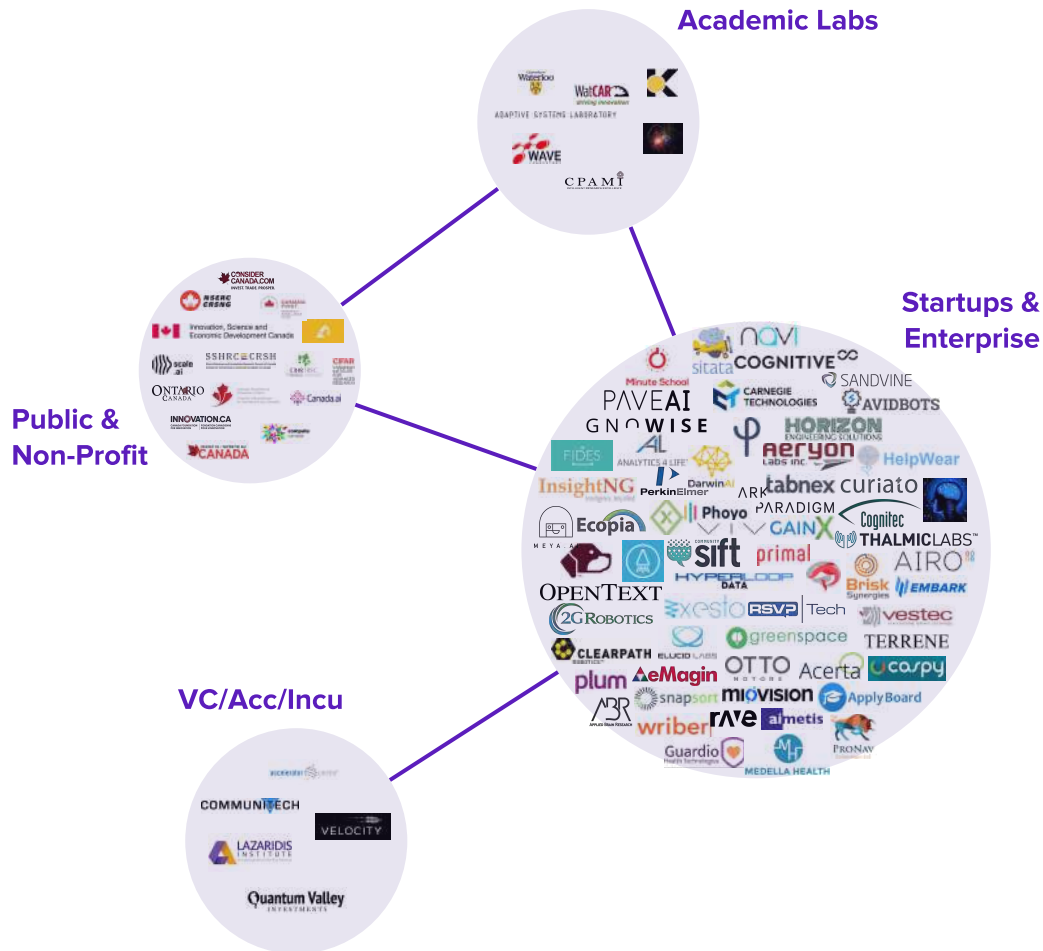
12 Public Research Labs

The university of Waterloo is outputting very diverse and strong talent

A burgeoning entrepreneur culture is taking hold

Waterloo sees a large amount of talent being primed to be entrepreneurs and supported in their endeavors.

The Waterloo talent pool is slowly finding ways to resist Toronto's talent pump, which should help them continue to grow their startups.



Thank you for reading!

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jfgagne.ai