ventureLAB™

ANNUAL REPORT

2024

Table of Contents

Letter from the CEO

Dear ventureLAB Community,

As we reflect on the past year, I'm incredibly proud of how Team RIVIR has advanced our mission to empower hardtech founders and strengthen Canada's innovation economy. Our focus on sustainable AI and hardware-intensive industries, where Canada holds strong advantages, continues to drive transformative technologies and global competitiveness.

In 2024, we deepened collaboration with industry and delivered strong results. We expanded our AI Compute Sandbox and enhanced our dry lab facilities, enabling founders to test and scale their MedTech and AI solutions. We also advanced Canada's semiconductor cluster to support supply chain resilience, high-value job creation, and economic growth.

Expanding Global Networks

In today's complex trade environment, international collaboration is essential. With partnerships in 17 countries and growing, ventureLAB is helping position Canadian innovation on the global stage. After participating in the Global Partnership on AI Summit in Serbia, we signed agreements with their Ministry of Science, Technology and Innovation and four science parks to support cross-border advances in biotechnology and AI.

Strengthening Our Model

We continued to use public funding to unlock private investment, accelerate growth, and demonstrate value to our ecosystem. As part of Canada's Tech Network, we met with policymakers in Ottawa and formed key partnerships, including with EPOCH and CMC Microsystems. We also supported Canada's first CHIPS Month, a national celebration of our growing semiconductor sector.

At our largest HardTech Summit yet, we welcomed over 1,100 attendees, showcasing the strength of Canada's deeptech ecosystem. During the HardTech Pitch Gala, we replaced applause with hundreds of custom loud cups—a small but powerful symbol of how our work is gaining momentum.

Living Our RIVIR Culture

Our people-first culture continues to guide our work. We proudly achieved Great Place to Work certification and were named one of Canada's Most Admired Corporate Cultures for the fourth year in a row. These honours reflect the strength and resilience of our team.

Looking Ahead

In 2025, we are focused on deepening our impact in AI, MedTech, and semiconductors. We will continue building infrastructure, driving commercialization, and growing our collaborative ecosystem to support Canada's hardtech future.

Thank you for being part of this journey. Here's to an impactful 2025.

Hugh Chow
CEO of ventureLAB

Our Impact

All-Time

4338
COMPANIES SUPPORTED

7346
JOBS CREATED

$481M
INVESTED IN OUR COMPANY

136
TOTAL PARTNERS

2024 Highlights

418
COMPANIES
SUPPORTED

26
NEW
PARTNERS

595
JOBS
CREATED

89
IP FILED
/GRANTED

$106M
INVESTED IN OUR
COMPANIES

$122M
REVENUE
GENERATED

People and Culture

At ventureLAB, our mission to power hardtech founders to build and scale globally competitive ventures that advance Canada's knowledge-based economy is deeply rooted in a strong, values-driven corporate culture.In 2024 we continue to be recognized for our dedication to fostering an exceptional workplace, earning two prestigious awards:

Great Place to Work® Certification for the fourth consecutive year, based on direct, anonymous feedback from our incredible team.

Recognition as one of **Canada's Most Admired™ Corporate Cultures** for the fourth time, reflecting our people-first approach and high-performance work environment.

Our team consists of a wide range of professionals who have leadership experience in the public and private sectors, as well as in tech entrepreneurship and innovation. This year, our team RIVIR grew to 59 members, spanning Ontario, British Columbia, and Quebec. At the heart of ventureLAB is Team RIVIR, a set of five core values that define who we are and how we work together:

RELENTLESS
We overcome challenges with tenacity and resilience to achieve collective success.

INCLUSIVE
We embrace diverse perspectives, building trust and fostering collaboration across our team.

VISIONARY
We inspire bold futures by challenging norms and thinking differently.

INNOVATIVE
We celebrate curiosity and creativity, empowering our team to design new solutions.

RESULTS
We plan proactively, act transparently, and stay focused on delivering impact.

2024
Highlights Timeline

JANUARY

The Government of Canada invested $4.5 million in ventureLAB's Hardware Catalyst Initiative to support 30 technology companies and create and maintain over 170 jobs in southern Ontario. This marks a critical step in expanding ventureLAB's services for the HardTech sector.

APRIL

ventureLAB, in collaboration with York Region, the City of Markham, and CIX, spotlighted Canada's top HardTech innovators through a joint initiative to boost national recognition and industry impact.

FEBRUARY

ventureLAB launched the TechEdge program to support hardware and enterprise software scaleups with over $500,000 in resources, guidance, and networking to drive growth and industry leadership.

MAY

Avinash Persaud, VP of the Hardware Catalyst Initiative, represented ventureLAB at the TSMC symposium in Boston, fostering global partnerships in the semiconductor industry. Additionally, ventureLAB hosted a panel at the NACO Summit in Ottawa, highlighting investment opportunities in HardTech.

MARCH

ventureLAB's inaugural mission to China, Hong Kong, and Taiwan focused on global collaboration. In 10 days, 9 delegates visited 6 cities, held 30+ meetings, and explored new opportunities for Canadian HardTech companies fostering cross-border innovation.

JUNE

ventureLAB proudly announces the one-year anniversary of its HardTech Investor Network at HardTech Night, marking significant progress and achievements in the HardTech investment landscape.

JULY

In partnership with The City of Markham and York Region, ventureLAB sponsored the the inaugural HardTech Fest—Garage & Co's premier event at Startup Fest in Montreal—bringing together leaders across the Canadian HardTech ecosystem.

AUGUST

ventureLAB welcomed its largest-ever Hardware Catalyst Initiative bootcamp cohort, with 20 companies selected from 73 applicants, including 40% female founders—a milestone in advancing diversity in tech.

SEPTEMBER

ventureLAB and Sterling Industries signed a MOU in partnership with the City of Vaughan to strengthen MedTech innovation in Ontario.

OCTOBER

ventureLAB was a lead sponsor in the first-ever Canada's CHIPS Month, serving in the marketing and steering committees to promote the country's semiconductor leadership.

NOVEMBER

ventureLAB hosted its fourth HardTech Summit and Pitch Gala Dinner, bringing together more than 1200 leaders and innovators for Canada's premier deeptech and innovation event.

DECEMBER

ventureLAB was invited to participate at the Global Partnership on Artificial Intelligence Summit, with Garry Chan, Chief AI Advisor representing Canada on AI and innovation.

ventureLAB's Global Footprint

Oh, the Places We'll Grow: Mapping ventureLAB's Global Impact

In 2024, ventureLAB expanded its global footprint, forging strategic partnerships, advocating for innovation, and raising the Canadian innovation ecosystem's profile in AI, semiconductor technology, and Medtech. From Asia to Europe to North America, these efforts strengthened international collaborations and unlocked new opportunities for Canadian innovators.

ASIA

In March, ventureLAB conducted 30 high-impact meetings across Hong Kong, Taiwan, and mainland China, fostering key relationships in the semiconductor and broader ICT tech sectors. It formalized an MoU with the Seoul Business Agency to enhance startup collaboration and co-marketing initiatives. Additionally, its participation in the ESG for Climate Actions International Summit in Hong Kong reinforced a commitment to sustainability on a global scale.

NORTH AMERICA

Expanding its reach in North America, ventureLAB's mission in June to Quebec built strong connections in Bromont, Sherbrooke, and Montreal, connecting Canada's semiconductor corridor between Quebec and Ontario. Strengthening cross-border collaboration, ventureLAB participated in The Northeast Semiconductor Manufacturing Corridor Workshop, deepening ties with Hudson Valley FastFab (HVFF) in New York and reinforcing Canada's leadership in semiconductor innovation. As part of Canada's Tech Network, it also engaged in Ottawa's "Day on the Hill" to advocate for government support.

EUROPE

In November, ventureLAB led its second delegation to Electronica in Munich—Europe's largest electronics conference—collaborating with CMC Microsystems and receiving support from University of Toronto's Rotman School of Management. This initiative empowered Canadian founders to showcase their innovations, forge critical market connections, and expand business opportunities within the European electronics industry.

Furthering global partnerships, ventureLAB was also invited to represent Canada and participated in the Global Partnerships AI Summit in Belgrade, Serbia, advancing international AI collaboration. Following the summit, ventureLAB signed a Memorandum of Understanding (MoU) with Serbia's Science and Technology Parks in Belgrade, Niš, Čačak, and Novi Sad.

This agreement marks a pivotal moment in strengthening collaboration between Canada and Serbia to drive innovation in hardware technology and enterprise software.

Through these strategic missions and partnerships, ventureLAB continues to drive global innovation, fostering a connected, competitive, and resilient tech ecosystem.

Celebrating HardTech

HardTech Summit

The HardTech Summit, hosted by ventureLAB and York Region, is Canada's premier event for hardware, semiconductors, MedTech, AI, and automobility.

1100+
attendees over the two days

30
Tech booths

Pitch Gala sold out at 300 guests

Event Sponsors

York Region • vaughan • TORONTO GLOBAL • TECH BRIDGE • Sterling+ • Seneca POLYTECHNIC

ONTARIO BRAIN INSTITUTE / INSTITUT ONTARIEN DU CERVEAU • InvestHK • FYELABS • EP&T • Dell Technologies • CANADIAN MANUFACTURING

betakit • ATB CAPITAL MARKETS • AMD • VCYCENE • 105.9 The Region • MARKHAM

Panel Discussions - Day 1

- Building Chips, Building Futures: Canada's Role in the Semiconductor Supply Chain

- Semiconductors Power the Future of Everything

- MedTech at Home: A $Billion Opportunity for the Smart and Bold

- The Golden Horseshoe's Golden Ticket

- The Power of People: How Talent Can Help Bridge the Canadian Productivity Gap

- Fueling Hardtech Growth: Where is Canada's Competitive Edge?

- Fireside Chat: Ontario in the Fast Lane: Driving Innovation and Smart Mobility

- Commanding Attention: Practical Communications Tools for HardTech

Speakers - Day 2

OPENING REMARKS
Hon. Victor Fedeli

REMARKS
Melissa Lantsman

REMARKS
Mayor Scarpitti

KEYNOTE SPEAKER
Mark Miller

CLOSING REMARKS
Raymond Chik

HardTech Pitch Gala

The highlight of the evening was the HardTech Pitch Competition, where eight finalists took the stage to showcase their cutting-edge technologies. The competition celebrated innovation across sectors, with top startups competing for a total of $50,000 in awards.

Gala 1st Prize - Cattle Scan

Cattle Scan, a startup dedicated to early illness detection in cattle, won first place at the HardTech Pitch Competition, taking home the $30,000 Tech Bridge award. In 2024, they were also recognized at Inventures, hosted by Alberta Innovates, receiving the Award for Innovation in Agriculture in the category Growing Up: Food Tech Farm to Fork UP. Additionally, Cattle Scan was selected by Bioenterprise Canada for the Ontario Agri-Food Research Initiative Commercialization Stream.

The Pitch Competition was a great event to expand our network and an amazing opportunity to demonstrate our CattleScan system and build awareness. The award and funds we won will be reinvested into our system enhancement. We are excited to have ventureLAB as a reliable partner in our startup ecosystem.

Denis Tokarev,
Founder and CEO Cattle Scan

Gala 2nd Prize - Kimia Analytics

Kimia Analytics, a company manufacturing ICP Mass Spectrometers for a wide range of applications, earned the $20,000 Sterling award, showcasing the incredible innovations from our tech ecosystem. They developed the first compact, transportable, triple-quad ICP mass spectrometer, enabling rapid, ultra-sensitive, real-time process monitoring and field testing of water quality and semiconductor manufacturing.

Winning the ventureLAB HardTech Pitch Competition has been an incredible milestone for Kimia. The experience of pitching alongside such innovative companies and receiving invaluable feedback from the judging panel was truly inspiring. ventureLab has been a tremendous supporter of deep-tech startups, and we are grateful for their commitment to fostering hardtech innovation in Canada.

This award will help accelerate our efforts in refining our compact hybrid mass spectrometer technology and advancing our commercialization path as we work toward becoming a global leader in rapid PFAS and fluorine testing. We're excited for what's ahead and look forward to continuing this journey with the support of this incredible ecosystem.

Dr. Sina Alavi,
Co-founder and CEO, Kimia Analytics

Hardware Catalyst Initiative

20
COMPANIES ONBOARDED

189
JOBS CREATED

80+
PARTNERS

138
ALL TIME IP FILED/GRANTED

$31M+
CAPITAL RAISED

$9M+
REVENUE GENERATED

91
ALL TIME PRODUCTS COMMERCIALIZED

ventureLAB's Hardware Catalyst Initiative is Canada's only hardware and semiconductor focused lab and incubator, helping founders build transformative technologies in healthcare, consumer electronics, telecom, smart energy, and more. Celebrating five years of impact, the Hardware Catalyst Initiative has solidified Canada's position as a leader in HardTech innovation. Primarily funded by FedDev Ontario, the Hardware Catalyst Initiative accelerates time to market in a sector with long entry and scale cycles, empowering Canadian companies to grow locally and compete globally.

FedDev Ontario's strategic investment in the Hardware Catalyst Initiative, has positioned ventureLAB as a hub for next-generation HardTech innovation. This investment continues to pay dividends, fostering a comprehensive ecosystem that not only drives Canada's HardTech leadership today but will continue to build even greater value for the country in the years to come. Since its launch, the Hardware Catalyst Initiative has supported 95 startups, creating 728 jobs and enabling these companies to raise $82 million in capital.

Building on this momentum, ventureLAB proudly launched the seventh cohort of the Hardware Catalyst Initiative, equipping Canadian startups with critical resources, funding, and growth opportunities.From September to November, a focused bootcamp welcomed 20 companies, offering 6 CORE modules and 5 sector-specific sessions. The bootcamp culminated in a dynamic partner showcase, connecting 22 partners and generating over 90 valuable connections.

ventureLAB expanded its Hardware Catalyst Initiative lab capacity in 2024, reinforcing Markham's position as a key player in Canada's semiconductor and hardware ecosystem. The City of Markham's Mayor and Council have been steadfast supporters of ventureLAB events, and our experts have contributed as speakers at many of these engagements. Our collaboration with Markham and Vaughan also extended to the OVIN demonstration zone, while our partnership with York University's SmartTO RTSD allowed us to share best practices across these dynamic communities. As part of our commitment to innovation, ventureLAB also co-sponsored the HardTech pitch session at CIX 2024, highlighting 10 startups based in York Region.

Steadiwear.

Steadiwear has developed the world's first tremor stabilization device, the Steadi-One, for individuals with Parkinson's disease and Essential tremor using novel magnet-based stabilization technology. Following fundraising efforts, Steadiwear launched their third-generation Steadi-3 glove designed to reduce hand tremors for people living with Essential Tremor and Parkinson's disease. They showcased at the AgeWell Conference in Alberta, where they announced the launch of the latest iteration of their product.

MORPHACE

Morphace, now part of ventureLAB's Hardware Catalyst Initiative, began its journey in the Accelerated Growth Program. The company creates wearable technology that provides personalized, data-driven, and fully automated anti-aging skincare for busy women. With access to ventureLAB's hardware lab and advisory services, Morphace quickly accelerated its growth. The company is driving innovation in Canada's beauty and healthcare sectors, offering a unique solution that blends technology with skincare to meet the needs of modern consumers.

Kiwi Charge, now part of ventureLAB's Hardware Catalyst Initiative, began in the Accelerated Growth Program and rapidly accelerated with support from the hardware lab and advisory services. The company, focused on revolutionizing EV charging solutions, has achieved significant milestones in 2024. Notably, Kiwi Charge won $10K through the Entrepreneurship and Innovation Fund with York Region and ventureLAB, further fueling its growth. The company was also the only Canadian company selected for Rice University's Business Case competition, placed 3rd at TiECon 2024, and won the Top Venture Award and Schulich Startup Night's Best Tech Award. Kiwi Charge is live in three buildings and expanding with cities like Markham and Vaughan. It was also accepted into the OVIN Demonstration Zone.

2024 Participating Companies

Hardware Investment Readiness

In 2024 Hardware Catalyst Initiative's Investment Readiness Series was launched to support hardware-focused ventures, guiding them from product development to investment readiness.

Designed for companies preparing to raise capital within 6-12 months, the series ran from February to August, offering six modules focused on key topics such as market dynamics, fundraising fundamentals, financials, due diligence, investor communications, and closing.

The Hardware Catalyst Initiative's Investment Readiness Series addressed the gap in hardware-specific mentorship by providing one-on-one advisory sessions with industry experts. These sessions reinforced key topics like market dynamics, fundraising, financials, due diligence, investor communications, and closing, helping companies refine investor-facing assets and strengthen their investment-readiness. By combining ventureLAB's product-development capabilities with tailored guidance, the series supported companies in preparing to raise capital through cap table formulation, pitch deck clarity, storytelling, and product positioning.

Flutter Care is developing a non-invasive wearable device to monitor maternal-fetal health, aiming to detect early signs of fetal distress and improve perinatal outcomes. Throughout the Series they connected with key advisors, graduated from Techstars' 2024 cohort, and utilized ventureLAB's $11M Prototype and Testing Lab. The company has secured non-dilutive funding, partnered with Sheeboot and UCEED, and is progressing with its seed raise. Recently, they were named one of 150 national recipients of the $20,000 Desjardins Grant in the technology category and featured in Vancouver Tech Journal after winning at the #FemTechBreakfast series.

Driving HardTech Innovation

ventureLAB continues to drive growth in Canada's semiconductor and HardTech sectors, fueling innovation and building national capacity for deep tech commercialization. With a growing network of industry partners and a focus on strengthening domestic capabilities, ventureLAB is helping position Canada as a global leader in hardware innovation and advanced manufacturing.

On the second day of the HardTech Summit in November, Minister Victor Fedeli led a Semiconductor Ecosystem Roundtable hosted by ventureLAB, bringing together industry leaders, startup founders, and key stakeholders to explore new opportunities in Canada's semiconductor industry. This high-impact discussion included founders, CEOs, and CTOs from across the country, underscoring the importance of national collaboration in building a resilient semiconductor ecosystem.

In collaboration with York Region, the City of Markham, and CIX, ventureLAB launched a national initiative to spotlight Canada's top HardTech innovators, increasing visibility and amplifying industry impact. We also hosted Senator Colin Deacon, a champion for entrepreneurs, for roundtable discussions focused on improving federal innovation funding and creating a stronger investment environment for Canadian tech companies.

Through strategic partnerships, policy engagement, and world-class infrastructure, ventureLAB is helping shape the future of Canada's HardTech economy. As we continue to scale support for semiconductor and hardware companies, our work is focused on ensuring that Canadian innovators have the tools, capital, and ecosystem needed to lead on the global stage.

CHIPS Month Canada

A Semi-celebration

In 2024, ventureLAB played a key role in Canada's first-ever CHIPS Month, a landmark celebration of the country's semiconductor industry. In partnership with Destination Markham, Peer Group, and SEMI, CHIPS Month showcased Canada's growing influence in the global semiconductor ecosystem. As a leading sponsor, ventureLAB capped off the month with its HardTech Summit, bringing together industry leaders from the hardware, MedTech, automotive, AI, and semiconductor sectors.

The month featured a dynamic lineup of events, including workshops, panel discussions, and networking opportunities. Key events included:

- IEEE Conference on Electrical Performance of Electronic Packaging and Systems

- MEMS & Sensors Executive Congress

- Advanced Process Control Smart Manufacturing Conference

- SEMI North American Advisory Board Meeting

- ventureLAB's HardTech Summit

- CMC Microsystems's Canadian Semiconductor Symposium

MedTech at ventureLAB

ventureLAB's MedTech portfolio is leading the way in healthcare innovation, with impactful partnerships and a strong focus on industry collaboration.

The MedTech Portfolio at ventureLAB achieved significant milestones in 2024, demonstrating growth and impact across the ecosystem. This included the successful MOU signing with Sterling Industries, strengthening our commitment to MedTech innovation, and collaborations with leaders like OBIO, LSO, and Innovation Factory. The lab was prominently showcased to national and international delegates, fostering relationships with Vaughan Healthcare Centre Precinct, which includes ventureLAB, City of Vaughan, York University and Mackenzie Health.

We also hosted an exciting MedTech event at the Vaughan Studios & Event Space, bringing together 80 guests for an afternoon of insights and networking. The panel discussion on

"How to Achieve Commercialization Success as a Canadian MedTech Start-Up" featured incredible insights from Colin Hung, MedTech Advisor at ventureLAB; David Van Slingerland, CEO of Sterling Industries; Rohan Jacobs, Partner at MNP; and Michael Do, Founder at MedEssist. The panelists shared their experiences and strategies for standing out in the competitive MedTech market and successfully scaling their ventures. The event ended on a high note with a networking session, fostering meaningful discussions among industry professionals.

At the MedTech Conference 2024 in Toronto, ventureLAB's presence underscored its role as a key player in fostering collaboration with large medical device companies. Progress continues with founders from Hardware Catalyst Initiative Cohorts and high-potential ventures such as ActivateStaff, MedEssist, Prova, FlutterCare, and Able Innovations.

Deaf AI is dedicated to enhancing the public and digital experiences of the deaf community through AI-driven solutions. With a bold vision of developing digital humans as real-time sign language interpreters, Deaf AI aims to bridge communication gaps and foster inclusivity. The company is backed by $1.4 million in funding from Transport Canada as part of a larger $2.2 million project, reinforcing its commitment to leveraging cutting-edge technology for accessibility and innovation.

Able Innovations is developing advanced medical devices to tackle the pressing problem of patient transfer in healthcare. The patient transfer equipment in use today is unsafe, inefficient, and undignified for all parties involved. Able Innovations intends to extensively enhance the quality of care provision - ultimately improving clinical throughput across healthcare facilities and providing a safe and dignified care experience for patients and caregivers.In 2023, Able Innovations took home a total cash prize of $20,000 in addition to the Siemens Software Award valued at $33,000 at the HardTech Summit Gala.

PROVA Innovations is a Canadian medical technology company specializing in wearable solutions for in-home gait training and rehabilitation. Headquartered in Ontario, the company focuses on helping patients with brain injuries, neurological disorders, degenerative diseases, or mobility challenges regain function by promoting neuroplasticity and neuromotor recovery.
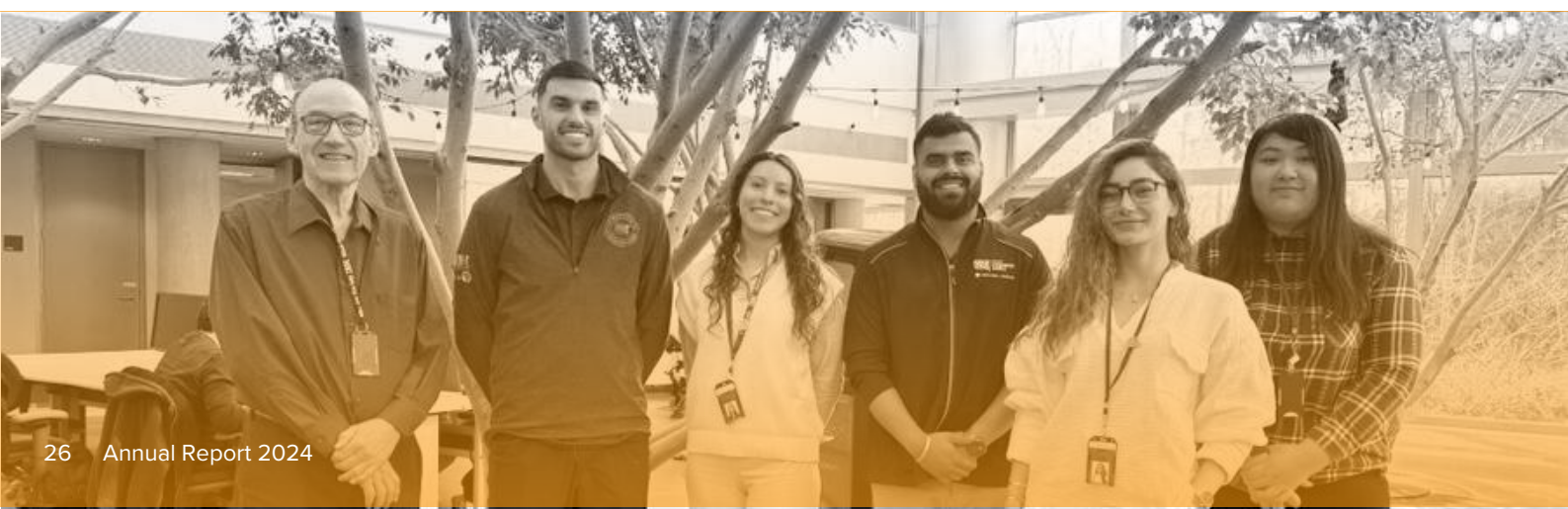
Semiconductor Leadership in Automotive

Semiconductors are the backbone of modern vehicles, with each car containing thousands of semiconductor components that power critical systems, from advanced driver assistance to infotainment and electric powertrains. As part of the Ontario Vehicle Innovation Network (OVIN) network, ventureLAB is working closely with the Ontario Centre of Innovation (OCI) and ecosystem partners to drive automotive innovation. By enabling startups and scale-ups to develop and commercialize cutting-edge semiconductor technologies, our ecosystem is shaping the future of smart mobility and intelligent transportation.

With support from OVIN and government initiatives, Ontario is advancing towards "Building the Supply Chain of the Future through the Creation of New Ventures and Made-in-Ontario Technology" As a key Regional Technology Development Site for OVIN since 2022, ventureLAB continues to incubate SMEs, aiding their development, testing, and prototyping of advanced automotive technologies and smart mobility solutions.

Building on this momentum, the Hardware Catalyst Initiative is deepening its focus on automotive innovation through its Automobility Stream—a two-year program designed to support startups developing novel hardware products. By providing tailored resources, expertise, and access to ventureLAB's world-class hardware lab, the program accelerates smart mobility and intelligent transportation solutions, strengthening Ontario's leadership in next-generation automotive technology.

Expanding our collaborative efforts,we were particularly engaged with OVIN partners in Markham and Vaughan, specifically SmartTO and the Vaughan/Markham Demonstration Zone. This involved participation in community events, company referrals between programs, and opportunity sharing. We were proud to collaborate across the OVIN network including with cybersecurity experts from Windsor-Essex, where we explored the importance of cybersecurity testing and introduced TARA and penetration testing services available through their RTDS. These initiatives supported founders with access to resources and programs that will help them scale and build out the automotive ecosystem in Ontario.

Participating Companies:

6HARMONICS · APOSYS · AutoMetrics · DAANAA

KIWI CHARGE · LoopX · nectar · OSCP

STUDIO 1 LABS · REEFERS TECHNOLOGIES INC · Whenergy · WIRELESS PARK N CHARGE

kevares Autonomous // Services · QA QUANTUITY ANALYTICS · TRANSPOD · ABR

APOSYS

Focuses on Digitizing transportation infrastructure monitoring for railways. Their Apollo Framework is an automated track inspection system that integrates real-time data from satellites, drones, and onboard sensors, delivering predictive insights that enhance safety, reduce costs, and save labor.

This year, ApoSys successfully demonstrated the Apollo Framework in safeguarding rail infrastructure against weather-related events. They also secured funding from NGen, which announced support for 31 companies across Canada's advanced manufacturing sector, recognizing ApoSys as a key innovator in railway technology.

OSCP

OSCP Motion Sensing Inc is a Montreal-based fabless integrated optics sensor company providing inertial navigation sensors for autonomous vehicles with accuracy comparable to the sensors used in the aerospace industry, but at a fraction of the cost. OSCP designs, develops, and produces innovative integrated optical motion sensors while focusing on Advanced Driving Assistance System (ADAS). In 2024 OSCP partnered with French multinational company Thales, which is developing autonomous rail systems to test OSCP's sensors. They also secured $1.2 million in seed funding, in addition to grants, which will support the commercialization efforts and continued electronic improvements of their prototype.

Canada Catalyst

Canada Catalyst is a specialized program designed for international companies in the hardware technology and enterprise software sectors, with a focus on DeepTech. By harnessing ventureLAB's personalized business advisory services, gaining access to exceptional talent from renowned Canadian institutions, leveraging an experienced support network, and tapping into extensive market expertise, Canada Catalyst serves as a springboard for international companies aiming to enter the Canadian market and beyond.

The Soft Landing program is a three-month program for international growth-stage hardware and enterprise software companies seeking swift entry into the Canadian market. It offers access to Canadian market expertise, top talent, and strategic advisory support. Over the past two years, ventureLAB has helped seven companies establish a presence in Canada, navigate industry dynamics, and understand regulatory requirements.

The Start-Up Visa program is a nine-month program,, designed to help innovative international companies establish and grow in Canada. This program offers expert guidance and access to a thriving tech ecosystem for international entrepreneurs to establish and grow scalable businesses in Canada. With a focus on helping startups succeed in Canada, ventureLAB equips entrepreneurs with the resources, market insights, and network needed to expand their businesses and thrive in the Canadian market. This year, ventureLAB signed agreements with 10 companies to help them expand and scale their businesses in Canada.

Claudio Arenas
CEO of qScire

Joaquin Figueroa
CTO and co-founder of qScire

Soft Landing Companies

Calilia is at the forefront of artificial intelligence medical robotics for skin and soft tissue treatment. Calilia is engaged in the development of a revolutionary skin analysis device poised to achieve groundbreaking advancements in precision and analytical capabilities.With a newly established office in Markham and a growing local team, Calilia is actively navigating regulatory approvals to bring its innovative technology to the Canadian market.

Chargeware aims to deliver innovative energy solutions worldwide, driving its mission to lead the transition towards a more sustainable and intelligent energy future. Its flagship product, the Home Flex Level 2 EV Charger embodies the company's commitment to innovation with its versatile wall-mounted or portable design and a maximum charging current of 40A. Building on this momentum, Chargeware has successfully launched its T-Series AC EV Charger, marking a major step forward in its mission to provide high-quality, reliable EV charging solutions. This achievement underscores the company's dedication to innovation and meeting the growing demand for accessible EV infrastructure.

Start Up Visa Companies

OneKiwi Technologies is dedicated to the development and manufacturing of innovative embedded platforms. The company's flagship products include System on Modules (SoM) and Carrier Boards (CB), which are integral to various embedded projects. OneKiwi's SoMs, such as the STM32MP15, STM32MP13, and NXP i.MX 8X, are designed to accelerate product development and enhance performance across multiple industries, including IoT and consumer electronics.

ConNexTube Technology is dedicated to revolutionizing the commercial emergency lighting market by offering a highly adaptable, intelligent solution that combines the latest advancements in LED and IoT technology. Their flagship product is their Connected Emergency Fixtures that incorporates their Building-Block LED Fixture (BBLF) system that aims to solve a variety of pitfalls found in standard LED lighting fixtures.

Accelerated Growth Program

ventureLAB's Accelerated Growth Program is a three to six-month program for early-stage tech entrepreneurs in hardware, semiconductors, and AI-driven enterprise software. It offers mentorship, strategic guidance, and access to industry experts. Participants also benefit from discounted Innovation Space access and perks to support their growth.

In 2024, we supported 60 startups, including 33 new ones across software, AI, MedTech, and hardware. Notably, 65 percent of the portfolio reflects Diversity, Equity, and Inclusion values, and over 24 percent are from outside Ontario.

Deep Breathe, an Accelerated Growth MedTech AI company in Toronto, is advancing healthcare in Canada.At Deep Breathe they combine lung ultrasound with advanced AI techniques to deliver portable, accurate and autonomous lung diagnostics. They won first place in the U.S. Army's xTechInternational 2024 Competition and were selected for the MEDTEQ+ Orbit Health project with the Canadian Space Agency. Featured in the Toronto Star, Deep Breathe is also supported by the TechAlliance of Southwestern Ontario's i.d.e.a. Fund, receiving funding and mentorship to drive MedTech innovation in Canada.

7Gen is an EV and charging infrastructure leasing company focused on medium and heavy-duty fleets. They simplify EV integration by offering lease-to-own EV-as-a-Service, financing, and software, helping fleet managers overcome upfront costs and knowledge barriers. Recognized in the Toronto Star with the Game Changer Climate Leadership award, 7Gen is driving sustainability and innovation in Canada's fleet electrification ecosystem.

RideAlike, an AI powered, peer-to-peer car-sharing marketplace for multi-residential communities offering a sustainable and convenient transportation solution. As an Accelerated Growth Program company at ventureLAB, RideAlike has been making significant strides in the automotive and smart mobility sector. Recognized as one of the Top 50 Hottest Startups at the Collision Conference and featured in Disruption Magazine, RideAlike continues to gain momentum in the innovation ecosystem. Through the OVIN Demonstration Zone partnership with the cities of Markham and Vaughan and The Remington Group, supported by a $2.5 million investment from OVIN, RideAlike is at the forefront of advancing smart mobility solutions in Ontario.

Tech Edge

TechEdge is ventureLAB's latest initiative designed to propel scale-ups into industry leadership. This initiative equips high-potential startups with strategic insights, advisory support, and essential resources to drive growth, commercialization, and expansion.

Covering growth strategy and customer acquisition, talent strategy, IP protection, national and international expansion, and investment readiness, TechEdge bridges the gap between early-stage growth and long-term success. In 2024, ventureLAB guided 15 companies, generating $90M in revenue and creating 30+ jobs.

GLYPH PLATFORMS

Glyph Platforms enables machines to understand real-world environments through its core technology, "Glyph," which provides real-time deformable surface tracking with embedded metadata. This allows machines to interact with objects both dimensionally and functionally. Over the past two years, the company has generated over $450K in revenue and advanced digital sustainability. With ScaleAI funding, Glyph Platforms has further developed its AI-powered computer vision solution, driving innovation in robotics and industrial automation.They've been part of ventureLAB since 2022, participating in three programs.

"We realized we needed help to build and scale AI technology into a viable business. When we looked into ventureLAB, we knew right away that we could learn and build with the help of the mentors."
Tahmeed Uzair Rahim, Founder at Glyph Platforms.

medessist

MedEssist empowers community pharmacies to provide personalized care, grow sustainably, and streamline operations with its patient relationship platform. Offering easy patient profile imports via scanning, it eliminates manual entry for efficiency. To enhance accessibility, MedEssist has integrated with Uber Direct for same-day medication delivery across North America. Additionally, its partnership with the University of Alberta's Faculty of Pharmacy and Pharmaceutical Sciences brings the platform into patient care courses, equipping students with real-world tools to improve patient outcomes.

Capital Investment Program

66
COMPANIES
SUPPORTED
(IN 2024)

43
COMPANIES
CURRENTLY
INVOLVED

$112M
TOTAL FUNDING
AMOUNT THIS YEAR

37
NUMBER OF
COMPANIES THAT
RAISED MONEY

420+
COMPANIES
INVOLVED
(ALL-TIME)

$420M
CAPITAL RAISED

ventureLAB's Capital Investment Program supports scale-ready companies across Canada by focusing on long-term capital strategies and sustainable growth. Specializing in hardware and deeptech, where over 60% of particip ating founders operate, the program addresses unique challenges to drive innovation and transformative change.

With support from IRAP, ventureLAB built a strong investment community around the founders we serve. Thirteen years of engagement with the ecosystem led to the development of our HardTech Investor network and four new programs: the National CIP, CIP+ for first-time women founders, a HardTech investment readiness stream, and international expansion with funders.

In 2024, we hosted eight Investor Showcases and our first-ever Investor Zone at the HardTech Summit, facilitating over 100 high-impact introductions. These efforts supported 66 companies in securing $125M from the Canadian investment ecosystem.

Notable Deals

Toronto-based Mosaic Manufacturing has **secured $28M CAD in equity growth funding**, led by Idealist Capital, to scale its Canadian-built 3D printing technology for manufacturing automation. The funding will support team expansion, infrastructure development, and customer acquisition in North America and Europe, as demand for nearshoring and on-demand manufacturing grows.

Ottawa-based Hyperlume has **raised a $17.8M CAD seed round**, led by BDC's Deep Tech Venture Fund and ArcTern Ventures, to commercialize its AI data center interconnection technology. Using microLED-based optical links, Hyperlume replaces copper wiring with light transfer, boosting bandwidth, energy efficiency, and reducing costs. This solution cuts cooling requirements, saves space, and reduces the carbon footprint, enabling higher-density computing for AI/ML applications. The company's innovative approach has already garnered recognition for its potential to revolutionize data center performance and address key challenges in high-performance computing.

Smart Nora **secured an $800K deal** on Dragons' Den Canada, with investors Brian Scudamore and Wes Hall backing the company, validating its AI-driven, non-invasive sleep technology and positioning it for accelerated growth. Since 2016, Smart Nora has been committed to improving sleep for the 2.6 billion people worldwide affected by snoring, using deep customer insights and sleep science to create innovative solutions that redefine wellness through technology and design.

Bidblox, an AI-powered copilot designed to optimize and streamline the bid workflow for Architecture, Engineering, and Construction companies, recently achieved significant milestones, winning the Expand North Star and Gitex Global pitch competitions and **securing a $50K Scale AI investment**. These accomplishments highlight Bidblox's innovative approach to helping AEC companies increase revenue, save time, and minimize errors. Additionally, Relocalize has been recognized as a recipient of the 2025 CIX Startup Awards, further cementing its role as a standout in the tech and innovation landscape

HardTech Investor Network

92
1-ON-1 MEETINGS

31
COMPANIES SUPPORTED

85
MEMBERS

11
EVENTS

The HardTech Investor Network is a national initiative connecting dedicated HardTech investors, generalists exploring the sector, and international investors seeking Canadian opportunities. The Network curates standout HardTech investment opportunities and supports companies building the future through breakthrough innovation.

The Network is improving access to capital for Canadian HardTech and deep tech companies at the pre-seed, seed, and Series A stages by uniting a growing community of aligned investors. It is rapidly becoming the largest collective of HardTech and deep tech investors in Canada and beyond.

ventureLAB gratefully acknowledges the leadership and guidance of the HardTech Investor Network's Advisory Board. Their expertise continues to shape the strategic direction and impact of the initiative:

- **Raymond Chik**
  Co-Founder, Untether AI and Hepzibah

- **Hugh Chow**
  CEO, ventureLAB

- **Ana Misra**
  Co-Chair, Angel One Investor Network

- **Sylvain Carle**
  Co-Founder and Executive Director, CIVIC

- **Eva Lau**
  Co-Founder and General Partner,
  Two Small Fish

- **Duncan Stewart**
  Partner, Deep Tech Venture Fund, BDC

- **Pierre Paffenhoff**
  Investment Director, Climate Tech Venture
  Capital, Fonds de solidarité FTQ

MISSION

"Powering Canada's leading network of HardTech investors to enhance informed decision-making and bridge the critical investment gap, propelling forward the nation's HardTech sector"

Supercharging Sustainable AI in Canada

40
COMPANIES SUPPORTED

147
JOBS CREATED

$15M
CAPITAL RAISED

26
IP CREATED

$10M
REVENUE GENERATED

In 2024, ventureLAB announced the third cohort of its Accelerate AI program, a six-month initiative designed to support the growth of AI startups and strengthen Canada's AI leadership. Funded by Scale AI, Canada's AI Supercluster, Accelerate AI empowers startups innovating at the intersection of AI and hardware. Designed for companies developing intelligent solutions that transform the value chain industry, this program provides targeted support to fast-track commercialization and growth. Participants gain access to expert guidance, resources, and strategic opportunities in four critical areas: talent acquisition and retention, customer growth, investment readiness, and technology advancement.

14 companies were approved for Scale AI funding in 2024, amounting to $570,000.

AI COMPUTE

ventureLAB has established the AI Compute Data Centre, a multi-vendor high-performance computing platform designed for AI training and inference. This cutting-edge facility provides a supportive environment for leading-edge SMEs to productize and commercialize their AI-powered solutions.

MedReddie, a women-led B2B SaaS health tech company, leverages AI and a Large Language Model to transform healthcare procurement by streamlining supply chains, reducing costs, and accelerating access to medical solutions. Its platform helps buyers identify market solutions, generate AI-driven due diligence questions, and refine evaluation criteria, while enabling suppliers to collaborate, streamline marketing, and connect with key decision-makers. MedReddie has participated in leading accelerators, including Google's North American Women Founders program, ventureLAB Accelerate AI, and Canadian Entrepreneurs in Life Sciences, with support from Scale AI.ventureLAB has played a key role in MedReddie's growth by providing strategic connections to funding opportunities—including $35K in Scale AI support—other acceleration programs, and high-profile speaking engagements.

Fairly AI is driving the ethical and responsible use of artificial intelligence with its AI governance, risk, and compliance software, which provides automated quality assurance for regulated industries. By combining a no-code platform with a network of test agents, Fairly AI proactively tests, monitors, and manages AI models to ensure alignment with policies and controls. Backed by $2.9M in funding and support from Scale AI, the company is building solutions that enhance the safety, security, and fairness of AI systems while meeting global regulatory standards.
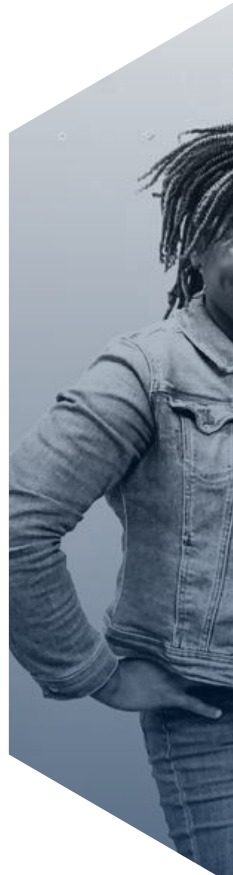
Digy4 is developing a cloud-based end-to-end software testing platform aimed at reducing the time for automated testing to a minimum to achieve operational efficiency. Their software solutions allow clients to accelerate their existing testing cycling by 10X with 250+ tests in under 3 minutes, set up cloud-based enterprise reporting to show all automation results in one place. and integrate all testing phases into a seamless cloud-based continuous testing pipeline. ventureLAB supported Digy4 by providing advisory services, conducting workshops, and connecting them to funding opportunities - including $50k in Scale AI support.

Vigilant A is an automated financial data management platform provider, founded by an experienced group of AI experts, international accountants, and data security professionals, who came together to help accountants automate financial data preparation to increase the labor efficiency and completeness of their audits and analysis. They leverage the latest Artificial Intelligence (AI) and Machine Learning (ML) techniques to automatically model and extract data from business process documents allowing customers to cross-correlate supporting documents against every accounting entry 80% faster than current approaches.Vigilant AI has partnered with Polar Labs to create a turnkey data-driven audit test platform built on Snowflake. The company was showcased at All In as one of Canada's top 100 AI startups. ventureLAB supported Vigilant AI with advisory, networking, and finding support - including $50k from Scale AI.

Our
Community

At ventureLAB, our values are what drive our work. Our RIVIR team grew this year and we now have 59 team members across Ontario, British Columbia, Manitoba, and Quebec. In 2024, we focused on building a stronger sense of community, creating opportunities to bring our team closer together. Our efforts have supported a dynamic and engaging workspace that encourages meaningful connections, promotes professional development, and strengthens the bonds between our team members and the broader tech ecosystem.

Our Partners

2024 has been a year of transformative growth for ventureLAB, marked by an expanded global presence and strengthened partnerships across key industries. We are excited to announce that our partner network has grown to over 80 organizations, with significant additions in AI partnerships that are central to our evolving AI strategy. A major milestone has been our unique collaboration with Tenstorrent, making ventureLAB the only Canadian startup accelerator working alongside this leader in AI hardware.

Epoch 時代基金會

easly

FRAGOMEN

Funded by:
Federal Economic Development
Agency for Southern Ontario
Canada

IBM

gapwireless

INJO

imec

Intellectual Property Ontario

intel

testforce

KEYSIGHT TECHNOLOGIES

York Region

CMC MICROSYSTEMS

Mackenzie Health

Markham Board of Trade

MARKHAM STOUFFVILLE HOSPITAL CORPORATION

MathWorks

Medtech Canada

MEGALAB Group Inc

MID Micro Interface Design

MNP

MUSE SEMICONDUCTOR

SCIENCE TECHNOLOGY PARK ČAČAK

MARKHAM

NGen Next Generation Manufacturing Canada

ONTARIO BRAIN INSTITUTE INSTITUT ONTARIEN DU CERVEAU

NRC·CNRC Canada NRC Industrial Research Assistance Program

OCI Where Next Happens

Ontario

Quantumscale FRACTIONAL TALENT SOLUTIONS

OVIN AUTONOMOUS · CONNECTED · ELECTRIC

ReMAP AAPF

Seneca

SIEMENS

SMT intelligence

snowflake

SOUTHLAKE REGIONAL HEALTH CENTRE

TELUS Business

Sterling

arm

STIM ELECTRONICS MANUFACTURING

SYNOPSYS Silicon to Software

tenstorrent

tsmc

HVFASTFAB

VAUGHAN

wistron

XtremeEDA

YORK UNIVERSITÉ UNIVERSITY

SIA SEMICONDUCTOR INDUSTRY ASSOCIATION

sba Seoul Business Agency

Our Board

ventureLAB's Board is pleased to reflect on a year of significant growth and achievement, underscoring our commitment to advancing Canada's knowledge-based economy. We expanded our partner network, securing key collaborations that strengthen our strategic focus on semiconductor, AI, and MedTech. These efforts align with our mission to empower startups with the resources, expertise, and connections necessary to achieve their goals and drive impactful advancements in these critical sectors. We remain dedicated to supporting the growth of entrepreneurs, ensuring they have the tools to scale and succeed in a competitive global market.

Yalda Riahi

Board Chair, General Counsel, St. Joseph Communications

Andy Taylor

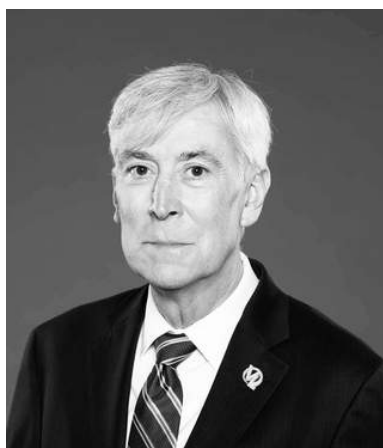Board Treasurer, Chief Administrative Officer for the City of Markham

Hugh Chow

CEO of ventureLAB

Altaf Stationwala

President and CEO of Mackenzie Health

David Agnew

President of Seneca College

Harry Zarek

President and CEO of Compugen

James Meddings

Partner at Northguide

Jason Tham

Co-Founder and CEO of Nulogy

Mark Miller

Executive Chairman of Volaris Group and COO of Constellation Software

Paula Cruickshank

Senior Vice President, Fund Investments at BDC Capital