

## Great Canadian Innovators





Meet 15 Canadian companies innovating in their field with transformative technology, like artificial intelligence, internet of things, edge computing, holograms, robotics, advanced analytics, and more!

Explorance, FGF Brands, HYAS, Kognitiv Spark, MindBridge, Napoleon, OneOcean, PUG Interactive, PureFacts, RamSoft, Spud.ca/Food-X, Tactio Health, ThoughtWire, Trevali Mining Corp, and vGIS.



# Great Canadian Innovators

Name	Sector	
Explorance	Analytics for learning	4
FGF Brands	Bakery (food manufacturing)	5
HYAS	Security (attribution intelligence)	6
Kognitiv Spark	Industrial task support	7
MindBridge	Analytics for finance	8
Napoleon	Fireplaces, gas grills, and HVAC systems	Ç
OneOcean	Integrated navigation solutions	10
PUG Interactive	Customer loyalty	11
PureFacts	Financial services	12
RamSoft	Medical imaging and radiology	13
Spud.ca/Food-X	E-grocery retail and fulfillment	14
Tactio Health	Remote patient monitoring	15
ThoughtWire	Internet of things (smart spaces)	16
Trevali Mining Corp.	Mining and metals	17
vGIS	Augmented reality visualization	18



## Innovation indeed

Thomas Edison had it right when he said that genius is one percent inspiration and 99 percent perspiration. Having a transformative idea that changes the world and gives birth to a business empire is the easy part. (Imagine that!) The real work involves bringing your idea to market without having to boil the ocean.

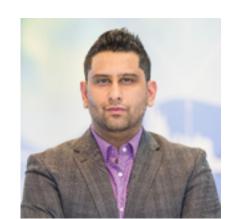
The 2020 Great Canadian Innovators Yearbook features 15 companies from across industries and provinces who have crossed that chasm. These businesses all successfully moved from brainstorming in a boardroom to a viable product or service offer in market—sold, supported, and in use by real customers in Canada and beyond.

We celebrate their creative application of technology and applaud them for their tenacity, resourcefulness, and sacrifice. Competing and winning in the technology industry, arguably the most competitive and fast-paced on Earth, is no small feat! We expect more great things in the years ahead. In the meantime, we hope you find their stories from the field as inspiring as we do.

Yours sincerely,

Harp Girn

Harp Girn
Vice-President, Small Medium & Corporate Sales







# Explorance, journey analytics

Founded in Montreal in 2003, Explorance is the world's largest provider of Journey Analytics solutions. Known for its culture of free will, the company is ranked as the #2 best workplace in Canada. Their use of Microsoft Azure machine learning powers many leading learning organizations.

#### Feedback matters

Every successful individual and organization invites feedback. During their academic career, students need feedback from their teachers and school to succeed. While on a corporate journey, employees need feedback to meet and (if all goes well) exceed expectations. As part of every product design roadmap, product and service teams need customer feedback to evolve.

#### **Enter Explorance**

Explorance's mission is to help organizations create a personalized journey of impact and fulfillment for their people through innovative feedback solutions. The Blue suite of products includes solutions for general surveys, employee engagement surveys, course evaluations, learning evaluations, 360-degree reviews, and live formative feedback.

Through the implementation of experience management, continuous listening strategies, and decision support, Explorance partners with organizations across the globe, including 35% of the Fortune 100 and more than 20% of the QS top 100 universities.

"Microsoft has supported and enabled Explorance to leverage its technologies easily and without the typical barriers that startups face early on in their journey."

> Samer Saab CEO

Behind the scenes, these Microsoft solutions power Explorance:

Azure SQL DB Azure Logic Apps Content Delivery Network Azure AD, Azure Monitor Azure Database for PostgreSQL Azure Key Vault Azure Event Grid Azure API Management

Visit www.explorance.com



"Microsoft technology enables us to achieve *growth through* enhanced digital transformation and to improve efficiency via automation of business processes."

> Tejus Ajmera CO-FOUNDER of FGF

Behind the scenes, FGF Brands uses several Microsoft solutions:

Azure SQL DB Azure Logic Apps **Azure Advanced Analytics** Microsoft HoloLens Microsoft Power BI **Power Automate** 

Visit www.fgfbrands.com

## FGF Brands, delicious innovation

Founded in Toronto in 2004, FGF Brands is one of North America's largest bakers of premium naan, flatbreads, sweet loaves, pizza crusts, and muffins. Its culture of curiosity and passion for innovation and quality has attracted global customers, including major brands across North America.

#### Baking, disrupted-speed, change and uncertainty

Like so many North American industries, large scale bakeries are undertaking rapid digital transformation. An increasingly competitive and sophisticated consumer marketplace has food and beverage manufacturers looking for innovative technologies to reduce waste, improve traceability, and drive profitability, quality, and differentiation.

#### Meet FGF Brands

Describing itself not as a bakery, but as "a technology company that bakes," FGF calls on its world-class team of engineers, food scientists, chefs, and bakers to innovate. From their high-tech facilities in Canada and the United States, they create wholesome, natural, high-quality foods and bring them to market with incredible speed and scale.

FGF continues to innovate with Microsoft technology. As part of their vision for the factory of the future, they're investigating more process and operations automation with machine learning, AI, and facial recognition.





# HYAS, tracking hackers

Founded in Victoria in 2015, HYAS provides attribution intelligence solutions that enable security teams to identify the specific threats and adversaries targeting their organization. Fortune 50 and 100 companies rely on HYAS' unique data capability to pinpoint perpetrators.

#### Cybercrime wave

North America has experienced a cybercrime wave in recent years. StatsCan reports that over 20 percent of all Canadian businesses experienced a cybersecurity incident in 2017 alone! With brands and bottom lines at stake, both the private and public sector need every tool they can find to defend themselves from hackers and other cybercriminals.

#### **Introducing HYAS**

HYAS products, like HYAS Insight and HYAS Protect, use threat attribution and unique insights to proactively protect enterprises from future attacks and deliver pre-zero-day security. HYAS offers an unparalleled view into the evolving adversary infrastructure, enabling the identification, monitoring, and blocking of attacks before they happen and, in many cases, the tracking of adversaries to their physical doorsteps.

HYAS' "to the doorstep" accuracy has attracted major customers from across industries and sectors, including multiple Fortune 50/100 companies and government agencies.

"Microsoft Azure helps us to refine the science and use machine learning to improve our art. The result greatly improves cybersecurity for our enterprise customers."

David Ratner, Ph.D.

Behind the scenes, HYAS uses diverse Microsoft technologies, including:

Azure Active Directory
Azure Machine Learning
Azure Functions
Azure Event Hubs
Azure SQL
Azure Cosmos DB
Azure Queue Storage
Azure Stream Analytics

Visit www.hyas.com



"RemoteSpark gives remote workers the confidence to perform complex tasks right the first time. By connecting them to experts, remote workers can harness the power of mixed reality."

> Ryan Groom CO-FOUNDER & CTO

Kognitiv Spark uses several Microsoft technologies to operate, including:

Azure Stack **Azure Custom Vision** Azure IoT Hub Azure Cosmos DB Microsoft HoloLens

Visit www.kognitivspark.com



# Kognitiv Spark, smarter support

Founded in Fredericton in 2016, Kognitiv Spark is the industrial task support software leader. They use augmented and mixed reality to deliver interactive 3D content and artificial intelligence in the field.

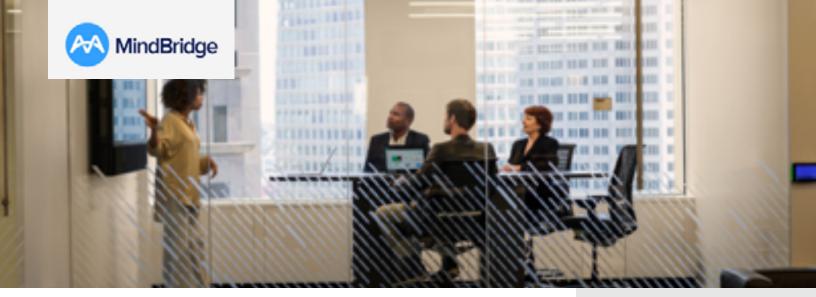
#### Downtime costs money

In capital-intensive industrial manufacturing sectors, like aerospace, defense, energy, or utilities, the cost of downtime quickly soars. One issue is access to technical support. Manufacturers invest heavily in new technology, such as robotics, but when equipment breaks down, they have to wait and, often pay for, a technician to deliver support.

### **Kognitiv Spark reinvents support**

Kognitiv Spark uses mixed reality to deliver secure and reliable remote worker support. Their RemoteSpark platform minimizes downtime ingeniously. Workers can now do-it-themselves by putting on a HoloLens, connecting with an expert and interacting with 3D content, which can be augmented with live IoT data and artificial intelligence.

The ability to digitally connect remote workers to expert resources, leveraging a suite of mixed reality functionalities, reliably in low-bandwidth environments is a game changer for many organizations. RemoteSpark offers network modularity to meet varying requirements.





# MindBridge, augmenting insights

Founded in Ottawa in 2015, MindBridge developed the world's first and only auditing solution that leverages artificial intelligence to process huge amounts of financial data and provide insights.

#### The impact of errors, intentional or not

Anyone who works in the finance industry can testify to the high cost of errors. Each year, the worldwide economy loses vast sums of money due to errors and misstatements. According to the ACFE 2020 Report, organizations lose 5% of revenue to fraud every year, with an average loss of US \$1.5M per case.

#### MindBridge quantifies risk

MindBridge introduced Ai Auditor as the world's first financial analysis tool based on artificial intelligence in 2017. Ai Auditor revolutionizes financial analysis by augmenting an auditor's capacity to analyze financial records and uncover irregularities caused by unintentional errors and misstatements. As such, auditors can provide their clients deeper insights and higher risk assurance for all of their data.

MindBridge's approach augments the focus, insights and professional judgement required by financial experts. Leveraging Microsoft's cloudbased, secure, and reliable infrastructure levels the global playing field. To date, MindBridge has signed 300+ customers in 14 countries.

"Working with Microsoft enables MindBridge to scale exponentially and securely to meet the needs of leading organizations all over the world."

> Eli Fathi CEO

Behind the scenes, MindBridge uses several Microsoft technologies including:

Azure IaaS Azure SQL Azure Database for PostgreSQL Azure Active Directory **Azure Functions** 

Visit www.mindbridge.ai



"Microsoft has been a vital partner on our technology roadmap. The advances that we have gained, will continue to enrich our customer experience."

Jean-Louis Marin
VICE-PRESIDENT,

INFORMATION SYSTEMS

Behind the scenes, Napoleon uses Microsoft technologies to operate, including:

Dynamics 365
Microsoft 365
Microsoft Power BI
Microsoft SQL Server
Azure DevOps
Custom .Net Microservices

Visit www.napoleon.com



## Napoleon, enhancing life moments

Founded in 1976 in Barrie, Napoleon has a global dealer network that spans 16 countries. Napoleon invests heavily in research and development for their products lines: fireplaces, gas grills, and HVAC systems.

#### Disconnected backend

Until recently, customers, frontline employees, and dealers operated in a more traditional way that limited Napoleon's ability to leverage data for better decision-making. To significantly improve the customer and dealer experience, it was crucial for the company to enable access to real-time data and analytics across Napoleon's entire network.

#### Now open 24/7

As businesses began operating from home, Napoleon's network leveraged Dynamics 365, Microsoft 365 and Microsoft Teams. These Microsoft solutions connect their backend processes to their customer and dealer experience. Overnight, Napoleon transformed into a self-serve, 24/7 business model.

Customer transactions are now online. Providing frontline personnel with access to data assists dealers in planning product inventory and advising customers. Recognized as one of Canada's Best Managed Companies, Napoleon continues to innovate their product lines and experience model.





# OneOcean, unifying navigation

Founded in Montreal in 1992, OneOcean delivers industry-leading integrated navigation solutions to almost 20,000 marine vessels and diverse shore-based stakeholders worldwide.

#### Efficiency

The search for efficiency propels modern shipping. In a ferociously competitive global marketplace, vessel operators search for efficiency in every aspect of their business. From procurement and fuel consumption, to logistics and administration, this search for efficiency at every level has only increased the demand for better technology.

#### OneOcean leads the way

OneOcean specializes in integrated navigation and compliance solutions that improve efficiency and ease day-to-day operations onboard and onshore. The company offers an impressive portfolio of innovative products and services, including the most advanced "pay as you sail" on the market, dynamic environmental and regulatory guidance, as well as integrated navigation through PassageManager and SeaTab.

In 2019, OneOcean became the largest digital solutions provider in the maritime sector through a merger of Marine Press and ChartCo. The new company remains focused on driving digital transformation in shipping.

"OneOcean uses
Microsoft Azure,
Windows, and
Surface because
they are widely
recognized and
adopted worldwide."

Alexandre Lapointe

OneOcean uses several Microsoft technologies, including:

Azure Service Bus
Azure Virtual Machines
Azure SQL DB
Azure App Insights
Azure Functions
Azure Container Registry

Visit www.oneocean.com



"Microsoft's cosell initiative and
product support
teams help us drive
new leads, generate
quality business
opportunities, and
dramatically amplify
our marketing
presence."

Steve Bocska

Behind the scenes, PUG Interactive uses many Microsoft technologies to operate, including:

Azure Database for PostgreSQL Azure Cognitive Services Azure Data Lake Storage

Visit www.puginteractive.com



## PUG Interactive, engagement reimagined

Founded by expert video game designers in Vancouver in 2008, PUG Interactive applies gameplay practices and technologies to solve complex business challenges. Global brands work with PUG to delight their communities.

#### **Apathy**

Apathy hurts businesses. When a customer or an employee stops caring about your brand, you're in trouble. Eventually, they will shop or work elsewhere, dramatically impacting your bottom line. In today's increasingly competitive marketplace, businesses need better ways to entice and motivate their customer and employee communities.

#### PUG picks things up

PUG creates end-to-end experiences that engage brand communities more effectively than typical loyalty tactics. Their versatile, award-winning Picnic™ Customer Engagement Hub delivers retention, loyalty, and motivation solutions for large audiences and enterprise applications. These playful places foster the identity, reputation, and status of their community members to increase involvement, motivation, and brand advocacy.

PUG is not just playing around! Their metrics show their solutions deliver eight to 12 times the demonstrable engagement of basic loyalty offerings, as well as increasing revenue, referrals, and operational efficiencies.





# PureFacts, transparent investing

Ranked a WealthTech 100 Company for 2020, PureFacts provides wealth management solutions for the financial services industry in Canada, USA, UK, and the Caribbean. PureFacts uses AI, big data, and their industry expertise to help firms realize value, increase productivity, reduce costs, and create an enhanced customer experience.

#### Transparency and trust in investing

New financial instruments, market dynamics, indexes, currencies, macroeconomic events, investment performance, and embedded fees – it is easy for investors to get lost in the complexity. Where there's a lack of transparency and understanding, there's a lack of perceived value that wealth managers create for their clients.

#### PureFacts points the way

PureFacts is known for creating transparency with wealth management fees, reporting and insight solutions. Their solutions aggregate financial data from disparate sources to build a simple, accurate and digestible view of an investor's complete financial situation.

After moving to Azure, PureFacts can now manage terabytes of customer data in a secure and scalable fashion, while being compliant with banking standards.

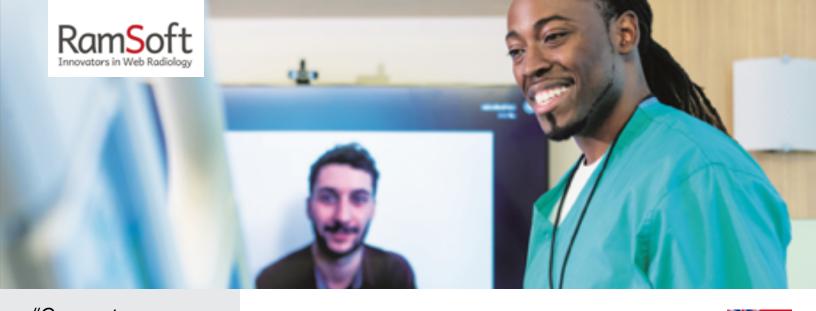
"The knowledge Microsoft has provided helps us drive our AI strategy forward and saves us a lot of time and costs in trying to learn everything on our own."

> Victor Skrylev VICE PRESIDENT, PRODUCTS

Behind the scenes, PureFacts uses Microsoft technologies including:

.Net Framework Azure Event Hubs Azure SQL Server **Azure Functions** Azure Cosmos DB Azure Machine Learning Azure Cognitive Services

Visit www.purefacts.com



"Our customers see huge advantages in the scalability, security, and reliability of Azure over traditional onpremise solutions and other hosting providers."

Vijay Ramanathan

PRESIDENT & CEO

Behind the scenes, RamSoft uses several Microsoft technologies to operate, including:

Azure DevOps

**Azure Functions** 

**Azure Virtual Machines** 

Azure Monitor

Azure SQL

Azure Cosmos DB

Azure Cognitive Search

Microsoft Power BI

Visit www.ramsoft.com

# RamSoft, radiology reimagined

Founded in Toronto in 1994, RamSoft is a leading healthcare IT software and services company dedicated to delivering award-winning remote medical imaging and radiology solutions to customers worldwide.

#### Radiology

Radiology and other imaging technologies play a huge and critical role in modern healthcare. Family doctors and specialists turn to radiologists for consultation on the safest and most effective exam and treatment options for patients. With patient lives in the balance, radiologists need every advantage modern technology can bring.

#### RamSoft delivers

RamSoft's PowerServer™ RIS/PACS cloud makes it easy for radiologists, referring physicians, and their employees to collaborate—securely, compliantly, and remotely—on a patient diagnosis. Now deployed for COVID-19 testing, their cloud enables healthcare providers to keep their practices running while enabling referrers to view patient images in real-time, significantly accelerating patient treatment times.

Data accessibility is the key benefit of RamSoft's PowerServer™ RIS/ PACS cloud which enables diagnostic collaboration for radiologists and physicians. RamSoft's secure HIPAA-compliant instant messaging enables communication between staff.





# SPUD, greener groceries

Founded in 1997 in Vancouver, SPUD is a fast-growing local online organic food delivery company. They use Dynamics 365 and artificial intelligence to prepare and deliver grocery orders with almost zero food waste.

#### Food waste

The National Zero Waste Council reports that Canadians waste a staggering 2.2 million tons or \$17 billion of edible food yearly. Traditional grocery stores contribute to that waste with spoilage representing five to six percent of their sales. With our environment in the balance, a growing number of consumers expect better from the industry.

#### SPUD steps up

Poised for growth, SPUD services six Canadian urban areas and plans to expand to other cities in the near future. Its proprietary logistics platform is built on Microsoft Dynamics 365 and uses artificial intelligence to efficiently prepare and deliver grocery orders in an environment-friendly way. SPUD also offers Food-X Urban Delivery, a platform designed to empower grocery store banners to make urban delivery a reality.

SPUD operates a state-of-the-art 74,000 square foot facility in Burnaby that gives other grocery retailers access to their industry leading technology, warehousing, home delivery, and food preparation platform.

"Microsoft provides us with world class technology and services, enabling us to realize faster time to market, better uptime, and better performance."

> Jef King CTO

Behind the scenes, SPUD uses many Microsoft technologies including:

Dynamics 365

**Azure Functions** 

Azure Search

Azure Monitor

Azure API Management

Azure SQL DB

Azure SQL Managed

Azure Data Factory

**Azure Cognitive Services** 

Azure Logic Apps

Microsoft HoloLens

Visit www.spud.ca





. .

"Tactio was looking for a hosting partner offering constant reliability, quality and security. Microsoft delivered that to us in a UPS-like fashion."

Michel Nadeau

# Behind the scenes, Tactio Health

uses several Microsoft solutions

to operate, including:

Azure Cloud Services
Azure Security Center
Azure Managed Databases

Visit www.tactiohealth.com

## Tactio Health, connected care

Founded in 2009 in Montreal, Tactio Health's vision of digital care and connectivity for every patient has resulted in the adoption of their senior-friendly scalable solutions on four continents.

#### Continuity of care

Between doctor visits, patients might receive a phone call, an appointment date, a letter, or an email, but little else. Patients recover, schedule another appointment, or end up in emergency. Continuity of care suffers and everybody pays the price.

#### Tactio Health monitors remotely

Tactio Health makes it easy for doctors and patients to connect between visits, resulting in fewer trips to emergency rooms and lower health care delivery costs. Powered by a FHIR/SMART platform, healthcare is shifted from institution to patient-based care by combining mobile, web, IoT, analytics, cloud services, and health systems interoperability.

Compliant with the quality boundaries of ISO 13485 and security requirements of ISO 27001, Tactio Health creates senior-friendly software with the rigour of medical device manufacturers. With Azure, Tactio seamlessly updates its telehealth and remote patient monitoring solutions, enabling physicians to focus on their practices without technical concerns.





## ThoughtWire, smarter spaces

Founded in 2009 in Toronto, ThoughtWire orchestrates data from people, process, and physical environments to deliver smarter, safer, and more efficient hospitals, commercial buildings, and cities worldwide.

#### Smartening

You've heard of smart phones, smart cars, even smart fridges—but how about smart buildings, like hospitals, or smart streets and other infrastructure? Smart environments use diverse technologies to save energy, reduce stress, increase safety, mitigate wear and tear, and collect data to enable continuous improvement.

#### ThoughtWire works wonders

ThoughtWire delivers solutions for smart hospitals and smart buildings using its advanced digital twin platform and product suites. ThoughtWire enables hospitals to operate more cost-effectively, efficiently, and safely while simultaneously improving patient care. Innovative features, such as early "code blue" incident detection, patient status dashboards, and mobile collaboration tools improve the experience for everyone.

When leveraging their mobile collaboration tools, clinical staff can receive location-based notifications. Their solution can automatically dispatch medical aid, security, and even lockdown a facility depending on the nature of the incident.

"Microsoft understands our business, understands mission-critical and life-critical workloads, and gives us confidence that they'll be there throughout the entire journey."

> Dale Hall CO-FOUNDER & **EXECUTIVE VICE PRESIDENT**

Behind the scenes, ThoughtWire uses several Microsoft technologies:

**Azure Cloud Services Azure Virtual Machines** Azure SQL DB

Visit www.thoughtwire.com



"Microsoft has extensive experience in our industry. They match our hybrid model, deliver trustworthy services that fit well with our business model and requirements."

Derek du Preez

Behind the scenes, Trevali Mining Corp uses Microsoft technologies:

Azure SQL DB
Azure Advanced Analytics
Azure Machine Learning
Azure IoT Smart Sensors
Dynamics 365
Microsoft Power BI

Visit www.trevali.com



# Trevali, modernizing mining

Founded in 2007 in Vancouver, Trevali Mining Corp uses Dynamics 365 as a platform to improve operations and solve problems in real-time at remote mining sites across the world.

#### **Transforming mining**

As the industry rapidly digitizes, huge strides in technology have opened the door to real-time integrated operations. Empowered with modern technology, today's mining operators can simultaneously manage and optimize operations across multiple sites, even in remote locations.

#### Trevali Mining Corp trailblazes

This forward-thinking global mining company runs commercial sites in northern New Brunswick, Namibia, Burkina Faso, and Peru, and uses Azure services across the organization. This foundation enables a future expansion of services like advanced analytics, machine learning and IoT/smart sensors. Currently, Trevali leverages Azure SQL and Microsoft Power BI. The data they collect from their operational environment helps to support decision making and provides insightful analytics. Corporate applications, productivity tools, security, storage, disaster recovery, and associated services have also been migrated to Azure.

Coming soon, Trevali plans to deploy Dynamics 365 across languages, time zones, and regulatory environments.





# vGIS, revealing results

Launched in 2016 in Toronto, vGIS keeps wowing the world with their amazing augmented reality visualization platform that uses the HoloLens to find design errors and "see" hidden underground assets.

#### **Holographs**

You may think of them as science fiction, but municipalities, construction companies, design teams, and surveyors can use holograms and augmented reality to reduce errors, avoid accidents, and improve results. Innovative ways of visualizing 2D and 3D data enable teams to visualize the invisible, such as "seeing" underground infrastructure before they excavate or testing designs before they build.

#### vGIS augments reality

vGIS is a visualization platform that transforms BIM, CAD, GIS and other types of data into stunning augmented reality visuals using Microsoft HoloLens, a device people wear like glasses. vGIS aggregates data from multiple sources, including Autodesk models, Bentley BIM designs and Esri ArcGIS, to display it in a unified augmented reality view.

Among other benefits, vGIS estimates that their multi award-winning platform saves 12-20 hours per person per month and prevents up to 50 percent of excavation-related accidents, which are estimated to cost \$6 billion annual in North America alone.

"Azure, HoloLens, and Microsoft Mixed Reality enables us to design the most advanced visualizations solutions available today."

> Alec Pestov FOUNDER & CEO

Behind the scenes, vGIS uses several Microsoft technologies:

**Azure Digital Twins** Azure Remote Rendering Azure Machine Learning Microsoft HoloLens

Visit www.vgis.io



# Skilling benefits everyone, from students to CEOs

Skilling classes for technical and non-technical professionals.



Azure | Microsoft 365 | Dynamics 365

"In a rapidly digitizing world, building your technical skills and getting Microsoft certified can help you achieve more success."

Microsoft offers high-quality digital classes in English and French as part of its mission to empower every person and organization to achieve more. From students, developers, and managers, to frontline workers and CEOs—skilling benefits everyone. All classes offered by Microsoft Training Days are free. **Learn more**.

Start by registering yourself and your employees for one of the following fundamentals classes, and choose your path to your Microsoft certification.

#### **Azure Fundamentals**

You have big dreams and goals. Now, learn how to achieve them with the cloud! Master the most important cloud concepts and strategies. Drive digital transformation, collaboration, innovation, and better security.

#### **Power Platform Fundamentals**

Discover how to drive digital innovation and automation. Connect all your data to analyze your business performance. Build custom apps. Automate workflows! Learn what the Power Platform of solutions can do.

#### **Dynamics 365 Fundamentals**

Become a digital transformation expert! Get briefed on the new generation of integrated business applications enabling incredible innovation worldwide. Explore the boundaries of what's possible.

**REGISTER TODAY** 



# Three Canadian Clouds, one trusted provider.

Adapt your processes, your ideas, and your unique way of doing things to the new language of business. Only one solution provider can help you deliver a secure, scalable, productive, and accessible business model. Let's create a solution as unique as you are.

## Microsoft 365

Design a modern workplace.

LEARN MORE >

Azure
Invent
with
purpose.

LEARN MORE >

Dynamics 365
Insights
you can
act on.

LEARN MORE >

