



INSPIRE Program

2023 Program Report

PREPARED BY: NOWSHIN NAWAR ARONY, EXECUTIVE MEMBER



INSPIRE is a five-year program of research and community-based innovation at the University of Victoria that engages science and engineering students from underrepresented groups, including individuals of marginalized genders, Indigenous peoples, members of racialized minorities, people with disabilities, and LGBTQ2S+ individuals. We connect students with mentors from industry and the community to ideate and co-create solutions that address society's most pressing challenges, especially in the area of sustainability. INSPIRE is also a network of like-minded individuals where students are supported by ambassadors and industry mentors in an inclusive learning environment.

The 2nd year of INSPIRE featured its **Apprentice Garage Program, Youth Engagement** through **Youth-Led Software Development Workshops in High Schools**, the **INSPIRE Empower You Podcast** as well as an **Ideathon**. The Apprentice Garage program facilitated five **experiential-learning projects in Victoria, BC, Canada and Nepal** where diverse students worked on solving real problems affecting local communities, whilst co-creating with local client organizations and industry mentors from local companies to propose inclusive minimum viable products.

Our Mission

- Promote sustainability
- Provide dynamic, collaborative and experiential learning
- Engage local and global community challenges
- Foster respect and reconciliation
- Develop an inclusive learning environment
- Build a network of like minded individuals and organizations



DR. DANIELA DAMIAN

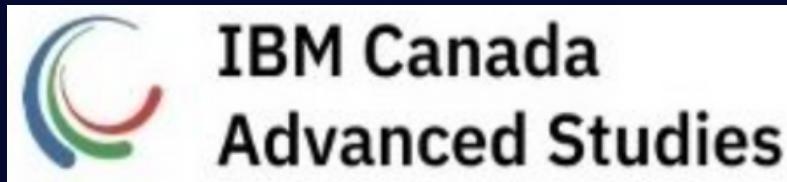
PROFESSOR & ECS-CAPI CHAIR OF INCLUSIVE SCIENCE, TECHNOLOGY & ENGINEERING
UVIC

Our Ideology

INSPIRE is an innovative hub centered around the idea of fostering a **sustainable**, and growing **multicultural and multidisciplinary community** where **inclusive and diverse** teams can engineer **inclusive and equitable solutions**. INSPIRE aims to promote and create for sustainable futures through dynamic, collaborative and experiential learning to engage communities locally and globally through fostering **mutual respect, reconciliation, and inclusive working relationships**.

INSPIRE Program Sponsors

INSPIRE's financial sponsors helped us create the community as well as projects that we have today. The program's executive team as well as all of its participants are extremely grateful for each and every one of our sponsors.



REDBRICK



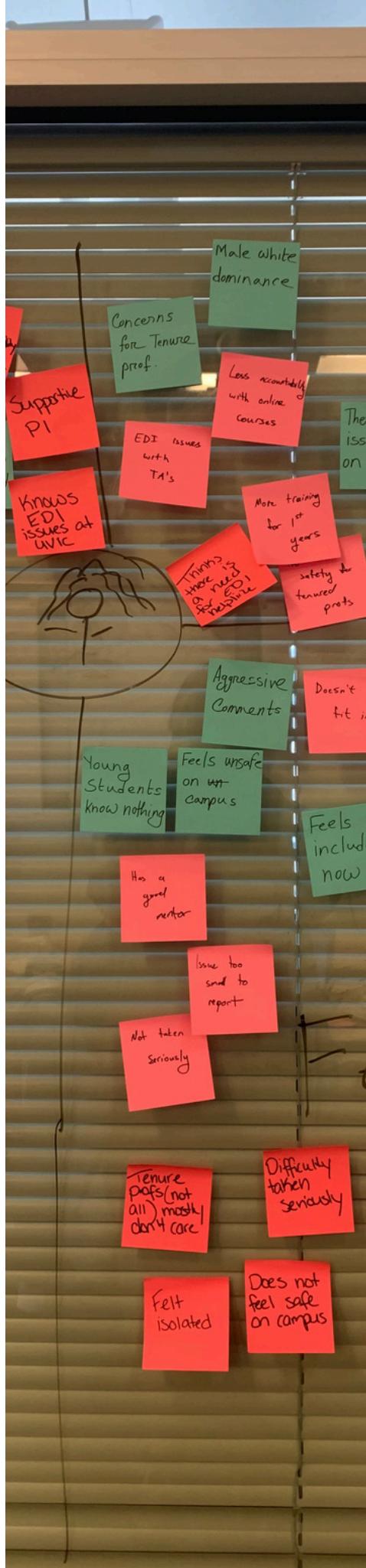
MICHELLE MAHOVLICH
Board Chair, Engineers
and Geoscientists
BC/Engineering

Our Teaching Style

Our approach to the design and implementation of the program utilized a mixture of both **interactive lectures** to teach theoretical concepts, **collaborative learning** and **fieldwork** for students to put these concepts and methodologies to use. By leveraging **diversity in teams**, and the promotion of inclusivity - teams are taught about the importance of EDI from the get-go. Throughout the entirety of the program INSPIRE focuses on the idea of **human-centered design** where our community partners (stakeholders) are engaged throughout the entire process. These communications and relationships are led and **maintained by the students themselves**. This has allowed each of our stakeholders and students to **build a trusting relationship** with one another, creating a collaborative, inclusive, and co-creative workspace with one another - simulating the relationships they will have with future clients in their professional careers. As part of the program students also interact with and build relationships with INSPIRE Ambassadors (graduate/experienced upper-year students) as well as mentors (local/international industry professionals) allowing them to ask for advice from a diverse range of individuals, report on project progress, and ask for opinions on project pivots when necessary.

Core Methodologies Used

- **IBM Garage Method**
- **IBM Enterprise Design Thinking**
- **Agile Software Development**
- **SCRUM Project Management**
- **Peer-to-Peer Learning**
- **Cross-Functional Management**
- **Multi-cultural, respectful interaction in inclusive teams**



1.5M

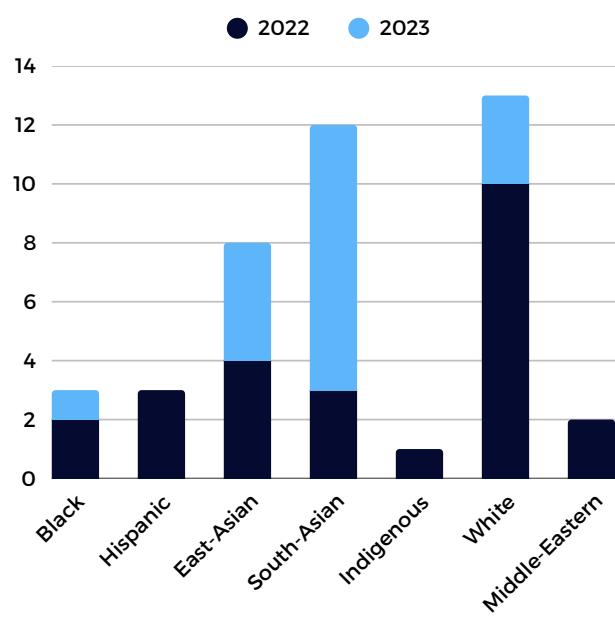
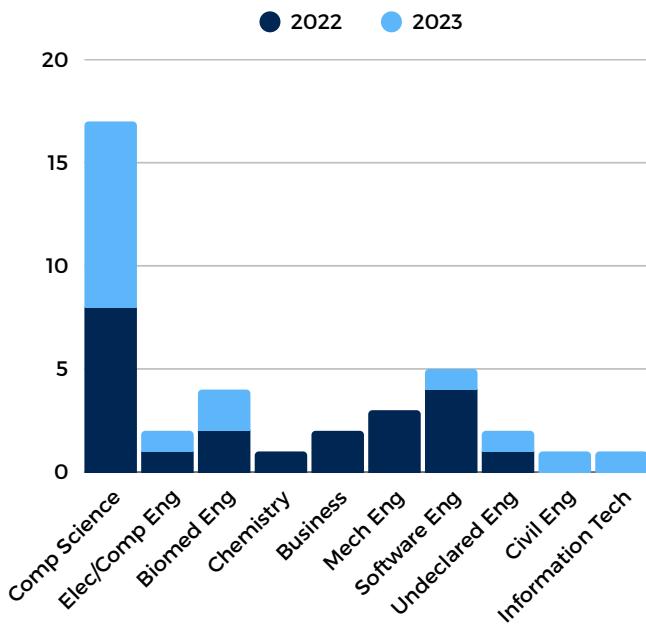
Canadian Dollars in funding secured for the program's first 5-years of operation

>50

Paid internships for students partaking in program

50%

Female representation within the INSPIRE Apprentice Garage Program



A **detailed research study** conducted by INSPIRE's teaching team both during and post-program completion through the examination of weekly team and individual student written reflections, as well as one-on-one focus groups, showed that the most valuable program learning outcomes were: **Task interdependence, empowerment** to take on new challenges, **belief in oneself, empathetic design, inclusive interaction**, and **team communication**.



70%

Program participants were made up of undergraduate students

10

Unique disciplines make up the programs in which INSPIRE students are pursuing degrees

2

Different countries host individuals involved within the INSPIRE Program

Our Advisory Board



MARCELLUS MINDEL

Marcellus Mindel is currently the CEO at Mindel Solutions and the former Head of Advanced Studies (CAS) at the IBM Canada Lab. His mission is to create transformative benefit for society through work integrated learning and applied research collaboration. Marcellus is passionate about creating inclusive communities of practice where multidisciplinary teams of students work "in the wild" to help service organizations.

MICHELLE MAHOVLICH

Michelle is Director of Engineering and Public Works with the City of Langford where she has worked for the past 14 years. Her responsibilities include overseeing road maintenance, new capital construction and new subdivision construction. Prior to working with the City of Langford Michelle worked in the private sector as Land Development Manager at the Bamberton Site in Mill Bay where she had managed the remediation of the former cement plant at this location. Michelle has worked in both geoscience and engineering fields having started her career in exploration geology, geotechnical engineering and then contaminated sites engineering.



VICTOR V. RAMRAJ

Dr. Victor V. Ramraj is Professor of Law and Chair in Asia-Pacific Legal Relations at the University of Victoria in British Columbia, Canada. Since 2017, he has served as Director of the Centre for Asia-Pacific Initiatives. Before returning to Canada in 2014, he spent 16 years at the National University of Singapore's Faculty of Law, and was twice seconded to the Center for Transnational Legal Studies in London. He also teaches regularly in the LLM in Business Law at Chulalongkorn University in Bangkok, Thailand. His recent research interests and publications span comparative public law, transnational regulation, and the regulatory challenges arising from the state-company relationship.



MEETA KHURANA

10 years as Associate Director, Engineering/CSC Co-op and Career Services at University of Victoria. I have previously worked at Nortel Networks and Alcatel Lucent (now known as Nokia) as a Software Designer/Developer. Have a Master's degree in Computer Science from Western University, a Bachelor in Information Systems from DePaul University, Chicago, US and a B.Sc. in Physics, Chemistry and Math from University of Lucknow, India.

MARCO PIMENTEL

Marco Pimentel is the Chief Marketing Officer at Redbrick - the parent organization to a portfolio of companies including Assembly, which he Co-Founded. Tasked with overseeing Redbrick's marketing and business objectives across all products and platforms, Marco is focused on connecting the organization's teams, nurturing creativity, and aligning the company's goals and objectives. His deep understanding of marketing, branding and partnerships was integral to the early growth of Redbrick, and its eventual place on the PROFIT 500 growth list.



RACHEL GREENSPAN

Rachel Greenspan is the Senior Director of Policy and Programs for Network BC in BC's Ministry of Citizens' Services. Her team's mandate is to connect all households in British Columbia to high-speed internet by 2027. Rachel has a strong background in technology policy and international relations. She is driven by a passion for public service, digital transformation, professional development, and tech workforce issues. Rachel's career has spanned positions in internet policy, journalism, the U.S. defence sector, and education. She was previously the General Manager for Lighthouse Labs in Eastern Canada, focusing on building a strong tech community and training the next generation of software developers. She believes strongly that career paths in technology do not need to be linear, and cares deeply about helping to grow a diverse and inclusive work force in the tech sector and beyond.

Our Executive and Ambassador Team



INSPIRE was founded by Dr. Daniela Damian - Professor of Software Engineering and ECS-CAPI Chair in Inclusive Science, Technology and Engineering at the University of Victoria. Receiving support from the University of Victoria's Faculty of Engineering & Computer Science, Faculty of Science, CAPI, as well as international and local organizations working within the fields of Engineering and Science.

Dr. Damian's own research motivated her to create the program. While at the University of Victoria, she has studied the success and failure of multicultural, globally distributed software engineering teams. She believes the most innovative and successful teams are the ones that can effectively communicate and represent society's diversity.

As director of the INSPIRE Program - Dr. Daniela Damian focuses on creating business strategies and proposing implementation methods for the program, researches literature on EDI, communicates with partnering company executives on program advancement, prepares business plans, budgets, and provides the executive team with the resources they need.

DR. DANIELA DAMIAN

Daniela is a Professor of Software Engineering and the ECS-CAPI Chair in Inclusive Science, Technology and Engineering at the University of Victoria. She also leads SEGAL, the Software Engineering Global interAction Laboratory at UVic, where she directs research in human factors and diversity in software engineering. As an immigrant to Canada, she has experienced, reflected on and become passionate about diversity and inclusion in software development and now wants to lead changes towards more inclusive STEM fields. Recently she was the recipient of the 2020 REACH Award for Excellence in Teaching for Experiential Learning at UVic, the 2021 Google Award for Inclusion Research, and the 2019 Royal Society New Zealand Catalyst: International Leader Award.



Apprentice Garage Coordinators are graduate students from the University of Victoria, working directly with the Director on managing program timeline, curriculum design and evaluation, trajectory, and overall supervision of the program including partnerships, and supporting resources.

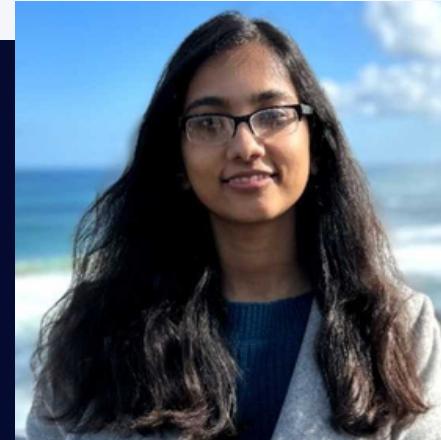


KEZIA DEVATHASAN

Kezia, program manager in INSPIRE, Canada, is a Computer Science PHD student at the University of Victoria. She has a strong research interest in software engineering education, and team collaboration in software teams. Both of these passions drive Kezia's enthusiasm and dedication to the INSPIRE program, and has enabled her to mentor the INSPIRE students, plan the program's curriculum, and deliver the lectures needed to ensure that the students have the knowledge they need to succeed.

NOWSHIN NAWAR ARONY

Nowshin, executive member in INSPIRE, Canada, graduated with her Master's in Computer Science from the University of Victoria. Her experience in Computer Science and User Experience Design Research has enabled her to mentor students who face challenges in understanding end-user requirements and designing inclusive solutions. She believes that the values of the INSPIRE program, which engages students in real-world projects while they learn, will create a driving force for finding motivation.



BACHAN GHIMIRE

Bachan leads INSPIRE Nepal and is currently working as a research affiliate with Dr. Daniela Damian at UVic, where he is studying software ecosystems. His experience as a founder and CTO of a software company in Nepal for several years has allowed him to leverage his network with universities and I/NGOs to establish INSPIRE in Nepal. He has assembled a core facilitation team, which includes a network of industry mentors, established office spaces, and secured funding from Tearfund, a program of the Scottish government in Nepal. This funding partially supports the INSPIRE Apprentice Garage teams in Nepal. Given the apparent socio-economic barriers to the adoption of digital innovation in Nepal, Bachan is committed to making contributions both scientifically and within the community through research and technical innovation for community development.

JENNA MEHLMANN

Jenna, ambassador of Rainwise, was born and raised in Victoria, BC. She has a BSc in microbiology, and is also a laboratory instructor within the Biology department and teaches second-year Cellular Biology and Genetics. She is extremely passionate about advocating for the accessibility of education within the science and engineering community and is grateful to be working with like-minded individuals in INSPIRE.



AHMED BELLO MOMOH

Ahmed, ambassador of FireForce, is a senior engineering student at the University of Victoria. He has a passion for exploring and working on environmental sustainability projects. He is also interested in research and design opportunities in the field of mechanical and biomedical design.

CRIS LACERDA

Cris, ambassador of Bridging Roots, is Senior Educational Analyst at CESAR School and PhD student in Computer Science at UFPE (Brazil), she is autistic and a researcher on neurodiversity & agile methodologies and Haraway's cyborg-thinking. In 2018 and 2019 she was a finalist in the Creative Learning Challenge Brazil, promoted by the MIT Media Lab.



Our Program Mentors



Thank you to our industry and academic professionals from partnering organizations who have been working diligently side-by-side with the Apprentice Garage Teams advising the students both on a team and one-on-one basis, on how to handle project pivots, manage various project phases, as well as how to refine their pitches. They came from the Victoria-based industry partners as well as joined remotely from Toronto and Kathmandu, Nepal!



Vibha MJ
Tram Ung
Holly Grewall
Jack Percy
Chantel Richard
Daniel Bourdage
Cassie Reaburn
Tara Rush
Rachel Greenspan
Levi Smith
Pream Silwal
Santosh Sahi
Aarjan Ghimire



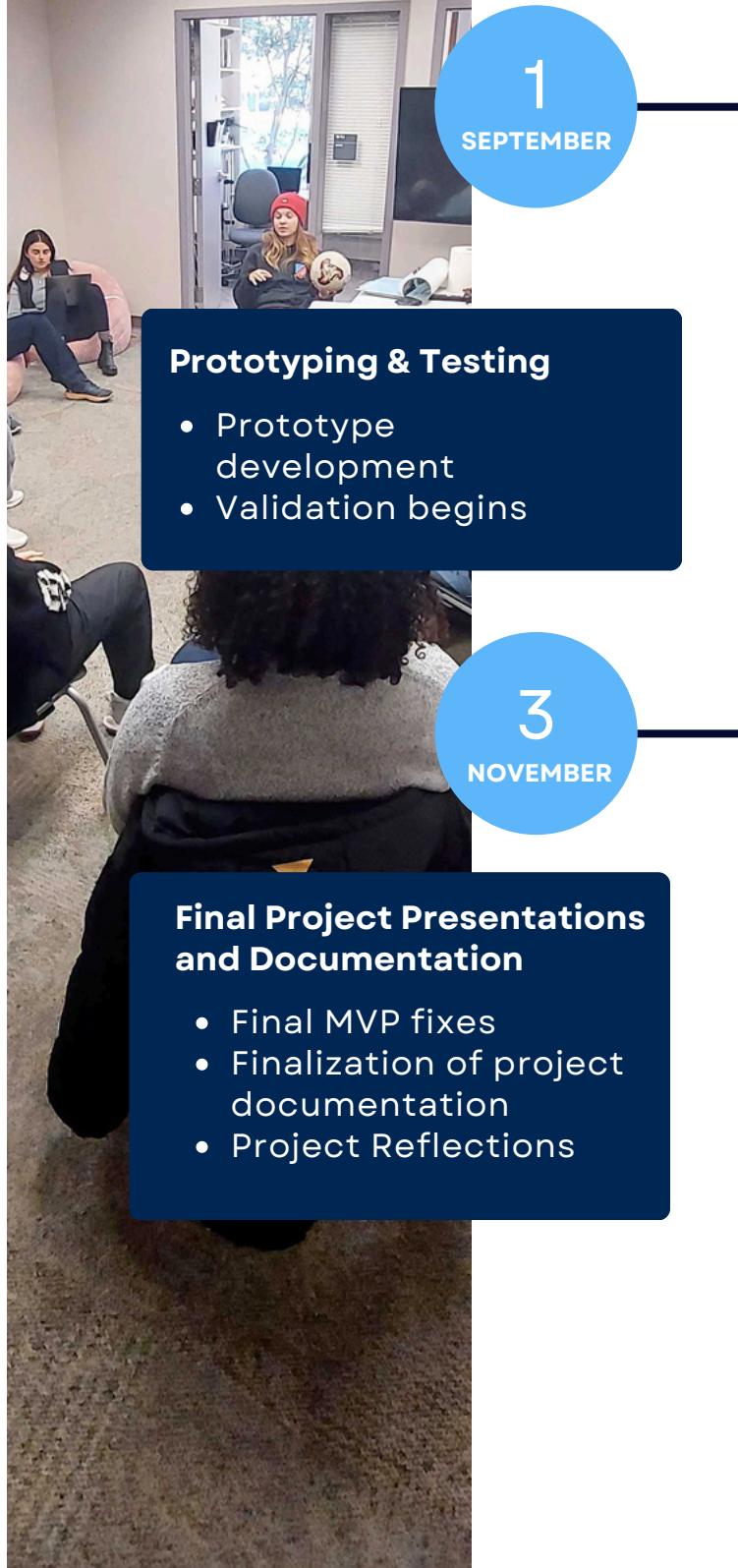
Our Apprentice Garage Projects

The 2023 Apprentice Garage Program included **18 undergraduate students between the ages of 18 to 25** with the students falling in the following areas of study: Software Engineering, Computer Science, Civil Engineering, Science, Biomedical Engineering, and Statistics at the University of Victoria, Victoria, British Columbia. Canada and Nepal. The student's ranged in ethnicity including: Asian, Black, and White - including both **international and national residents of Canada and Nepal**. In their projects, these students engaged with more than **200+ middle and secondary students from the schools in the Greater Victoria**.





The Apprentice Garage projects evolve over 4-months and are essentially team-based coop opportunities for our undergraduate students. They work over 4 consecutive stages to fully explore society impactful problem as well as create inclusive scalable minimum-viable products for each of their community partners.



PROJECT 1

Bridging Roots

An application that will be used to educate communities on the traditional knowledge, language, pronunciation, and history of the Indigenous community on whose traditional territory they reside.



[**LEARN MORE ABOUT THIS PROJECT HERE**](#)



BridgingRoots is a prototype application to educate communities on the traditional knowledge, language, pronunciation, and history of the Indigenous community on whose traditional territory they reside, or are visiting. As a starting point, we worked with students in **Tuktoyaktuk, NWT** to create a proof of concept for their community that could be used by visitors, or as an educational tool in the local school. The prototype included information about the Arctic games, food resources, and general information about the area. We interviewed community members to include pronunciations and videos within the prototype. Our goal is that the application will be scalable to cover other communities



The project was spearheaded by a team of four girls from St. Margaret's School and winners of the 2022 Westmont Design Challenge.

Mangilaluk School (Tuktoyaktuk)
Teacher: Michele Tomasino
Students: Chase Nogasak
Miley Wolki
Sophie Ross-Saunders
Darryl Tedjuk



Meet The Uvic Team



JON EDWARDS

Jon is going into his 3rd year of computer science degree is. INSPIRE was Jon's first co-op. It grew his confidence as a programmer and learned how to learn from mentors by learning how to ask the right questions to get the best help. This program was a great practice of lifelong learning in an experiential way. He is looking forward to continuing to build on these skills.



VALERIYA SAVCHENKO

Valeriya (Val) is going into her final year of SENG at UVIC. She hopes that she will be able to use the skills and all others learned throughout this program to collaborate with her team and provide the community with a unifying product that will create a genuine impact and change lives for the better while also creating meaningful connections with the Community Partners that will be involved in the process.

“We've learned the significance of being open and willing to share about yourself while building these relationships and this helps build trust and ensures the relationships goes both ways.”

ISLA STIVEN

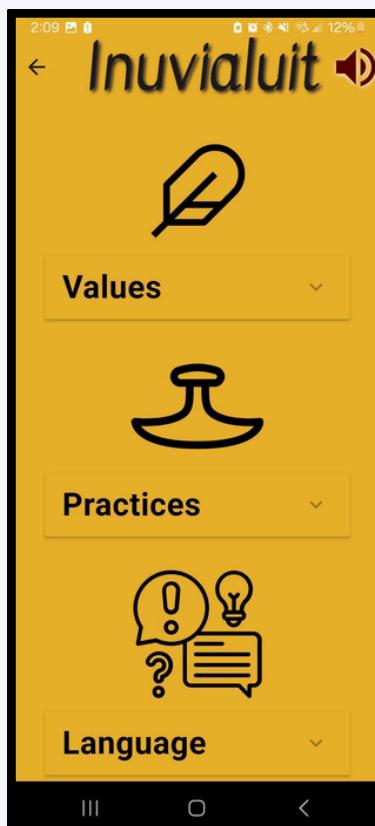
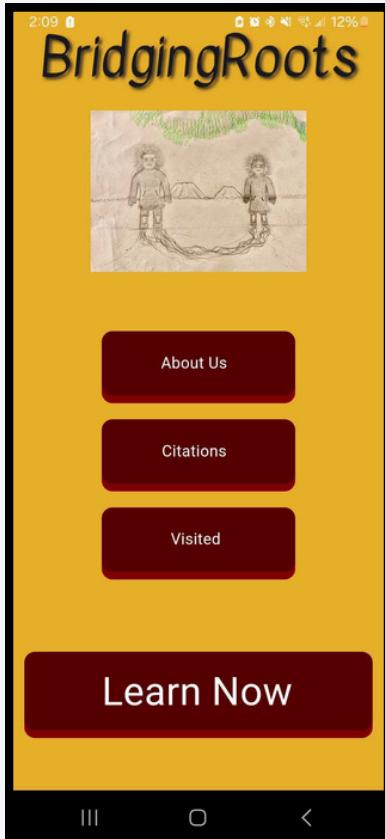
Isla is a third-year biomedical engineering student at the University of Victoria. Throughout her experience in INSPIRE, she strengthened her problem-solving, project management, and technical skills which she looks forward to applying to her future coops and professional endeavors. Being a part of a start-up like this as a first coop has been a very valuable and enriching experience, setting a solid foundation for her future career path.



KANWARPREET TOOR

Preet is in his final year of pursuing a degree in Computer Science at the University of Victoria. During his co-op experience with INSPIRE, he discovered a passion for the social aspects of engineering and project management—areas previously unexplored. With the guidance of his mentors, Preet has acquired valuable insights and skills, contributing significantly to his professional development and reinforcing his dedication to continuous improvement and growth as well as to creating his own start-up.

Current Prototype



PROJECT 2

RainWise

RainWise is a mitigation project focused on rainwater harvesting to provide better water security during the dry season to a community affected by drought.



[**LEARN MORE ABOUT THIS PROJECT HERE**](#)



Rainwise

The Root is a community food hub on Salt Spring Island owned and operated by the **Salt Spring Island Farmland Trust (SSIFLT)**. It has food processing and storage facilities that are used by local businesses, and a roughly 300 sqm garden for demonstrating permaculture practices while growing crops. The Root gets all of its water delivered, as it is not connected to the municipal water supply. SSIFLT wants an on-site water supply for the Root to help meet its water demands.

RainWise was conceived by four students from the **Shawnigan Lake School**, and they pitched the idea of rainwater harvesting at the 2022 Westmont Design Competition. Inspire selected it for further development, and we joined the project in September 2023. The Shawnigan students remained involved as collaborators. They originally wanted to work with schools in the Cowichan Valley, but we realised that we could accomplish more with smaller organisations. This led us to the Root, and we partnered with SSIFLT. After analysing the Root's situation, we decided to design a non-potable rainwater system to irrigate the permaculture gardens. To ensure that our design suited our partner's situation, we conducted site visits and collaborated regularly with organisation members and our industry mentors. We will provide SSIFLT with our designs and documentation, and the Shawnigan Lake students raised close to \$800 to help fund our system's construction.

"It has been very satisfying to see our research and preliminary designs begin to solidify into final system layouts and selected components."

- Rainwise Team

Meet The Team



REMEE BROWN

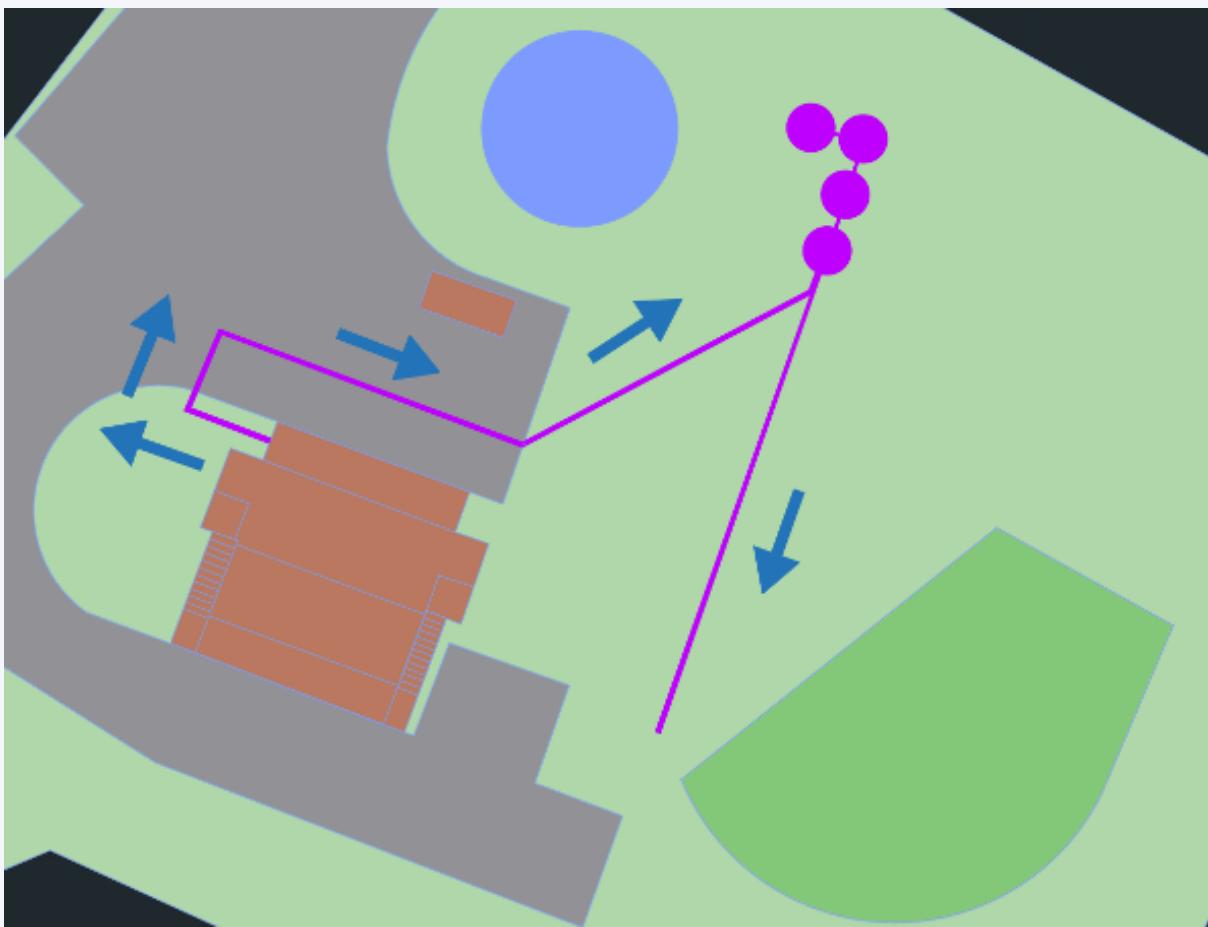
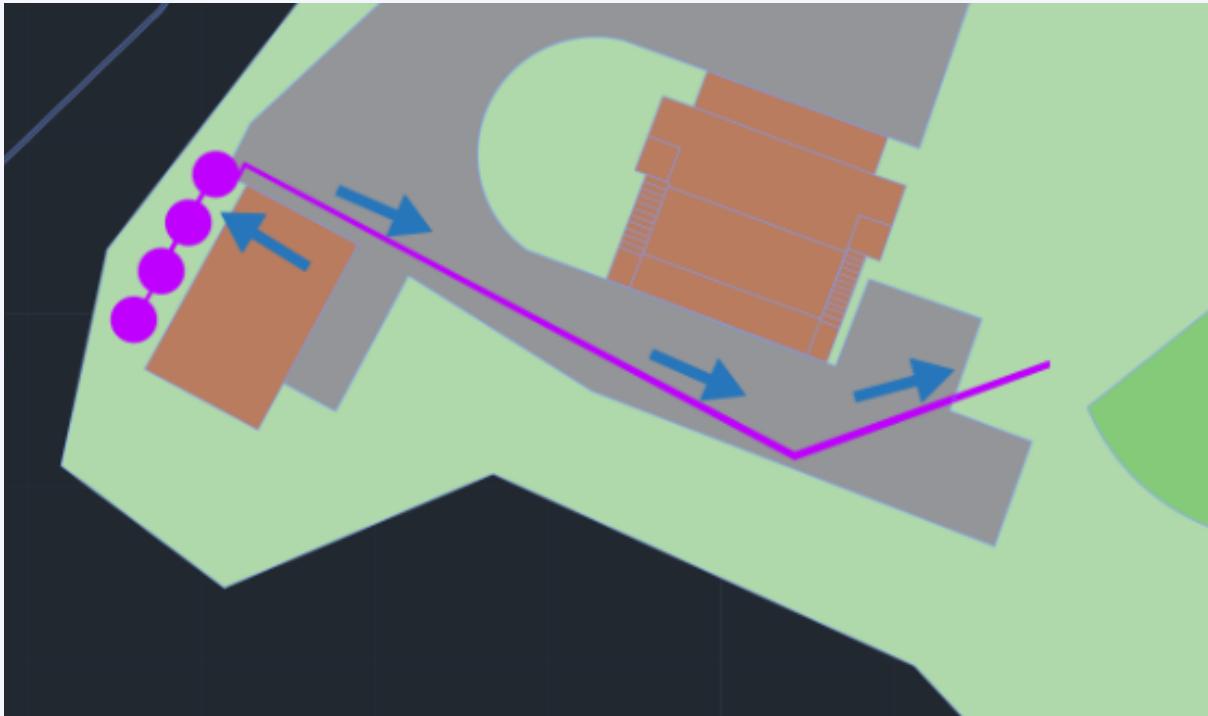
Remee is a fourth year biomedical-mechanical engineering student whose passion for water security lead her to join the RainWise team. Skills learned from INSPIRE will help her approach 'wicked' problems with much more motivation and skill. In her spare time she plays club rugby, does CrossFit, and enjoys surf trips on the island.



XAVIER AGUSTINES

Xavier is a 3rd year Civil Engineering student at the University of Victoria, and he is interested in the interactions between society and the natural environment. With the skills he has gained at INSPIRE, he hopes to contribute to making those interactions more positive for both parties. Xavier is an avid reader, music lover, and enjoys outdoor activities like hiking and sailing.

Final Solution



PROJECT 3

FireForce

A software that can optimize fire and trespassing detection across various monitoring hardware, necessitating in-depth research into wildfire management practices and techniques.



[**LEARN MORE ABOUT THIS PROJECT HERE**](#)



FireForce

The **Sooke Lake Water Reservoir** is Greater Victoria's main drinking water source and provides clean and safe water for over 400,000 people. The Capital Regional District (CRD) owns the property surrounding the Sooke Lake Water Reservoir, but more specifically the **Watershed Protection Division of the CRD** is in charge of its protection. The area surrounding this reservoir is over 50,000 acres, which is a lot of property to manage especially with their current manual monitoring practices. The Watershed Protection Division staff are required to manually patrol the vast property and manually watch the camera streams for any trespassers or fire, which both greatly impact the quality of our drinking water.

Due to a lack of autonomy, it is difficult to ensure the full protection of our drinking water. In response to this challenge, our solution incorporates AI technology to enhance fire and trespasser detection, providing the Capital Regional District's Watershed Protection Division with an efficient and proactive tool to protect the Sooke Lake Water Reservoir. The integration of AI ensures rapid and accurate identification of potential threats, helping to improve overall monitoring practices and protect the drinking water source for the 400,000 residents who rely on the reservoir.

"Our process was never linear, but we learned throughout the process. It was important that we understood each other's strengths and delegated tasks based on that. We also made sure that communication was done properly where everyone's opinion was voiced, and we understood each other."

- Fireforce Team

Meet The Team



SHYLA BURNS

Shyla is a third-year Software Engineering student at the University of Victoria. She hopes to continue applying the technical and soft skills learned through INSPIRE in her future academic endeavors, especially her new project management and team-based skills. She is passionate about reading and learning new things.



PUWENTAO YAN

Puwentao is a fourth-year Computer Science and Statistics student at the University of Victoria. He wants to apply his education to real-world challenges through INSPIRE, with a focus on using data science and AI to solve pressing problems. He is passionate about the outdoors and crafting.



UCHEOMA OKOMA

Ucheoma is a first-year Computer Science student at the University of Victoria. Her experience at INSPIRE has helped her gain not just technical but soft skills like teamwork, proper communication skills among others. She loves learning new things and ways to challenge herself.



SHUYI YU

As a dedicated 4th-year Computer Engineering student at the University of Victoria, Shuyi has gained invaluable experience through the INSPIRE program, focusing on a collaborative, innovative project called Fire Force. He is ready to apply the teamwork, problem-solving, public speaking skills, combined with technical skills developed at INSPIRE to my future career path, becoming a competitive force in the field of Engineering.

Final Solution for CRD

CRD: Watershed Protection Division

nigelburrows | Admin

Home
Alert History
Event History
User Management
LOGOUT

CURRENT ALERT

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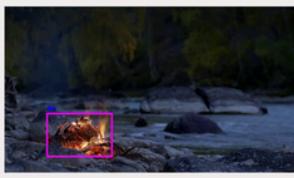
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Camera: Sooke Lake Dam Camera
Date: 2023-12-08
Time: 11:29:39 AM



New  update

Alert History


Detected: Bike


Detected: Fire


Detected: Person

CRD: Watershed Protection Division

nigelburrows | Admin

Home
Alert History
Event History
User Management
LOGOUT

Select Camera: Sooke Lake Dam Camera
Select Status: New
Select Date Order: Newest First
Select Object Detected: Fire

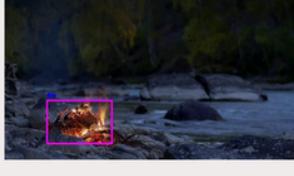
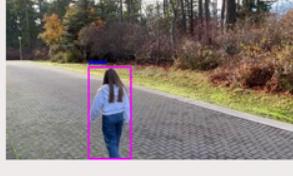
SEARCH **Reset Filters**

[View Alert History Summary](#)

Currently showing results for:

Camera: All
Status: All
Object Detected: All

ERASE ALL

PROJECT 4

BloodSync

A technological solution that bridges the divide between blood donors and patients, addressing blood-related issues to remote and underserved areas needing blood transfusions, local healthcare providers, Chaurjahari Hospital Rukum (CHR) staff requiring timely blood access, and potential blood donors.



[**LEARN MORE ABOUT THIS PROJECT HERE**](#)



BloodSync

Inspire Nepal's Blood Sync project tackles the critical blood shortage in the **Rural Rukum Community in NEPAL**, where lives are in danger due to insufficient access to timely medical blood supplies. To help people better understand the importance of donating blood, our team worked together with **Human Development and Community Services (a non-profit organization)**, **Chaurjahari Hospital in Rukum**, and **Chaurjahari Municipality of Rukum**. We focused on clearing up misunderstandings in the community and also tackled issues related to not knowing much about technology.

The team introduced a system with location-based donor searches and blood inventory management, tailored to the specific needs identified during on-site visits to Rukum. Acknowledging the community's trust in local representatives, the project's will be implemented through local representatives.

Despite challenges like a 30-hour drive from Kathmandu, language barriers, and time differences, the team adapted its approach. The commitment to resolving the blood supply crisis in Rukum remains unwavering, highlighting the project's significance in comprehending and addressing the unique challenges of the community. Through this innovative approach, the project not only mitigates blood scarcity but also fosters community engagement and bridges gaps in understanding, emphasizing the importance of tailored solutions for impactful change.

"Ultimately, the key takeaway from our interaction with community partners was the vital importance of maintaining professionalism throughout the entire meeting process. Regardless of the challenges or unexpected demands that may arise, conducting oneself with poise, respect, and a focus on the project's core objectives is essential."

- BloodSync Team

Meet The Team in NEPAL



LEELA SAUD

Leela is a final year student of Bachelor in Computer Science and Information Technology (B.SC.CSIT) studying in Padmakanya Multiple Campus affiliated to Tribhuvan University. Besides programming, she is also passionate about data analytics, keen-observation and in-depth-research.



BIBEK ADHIKARI

Bibek is a recent graduate of Pashchimanchal Campus, Institute of Engineering, Tribhuvan University, specializing in Electronics, Communication, and Information Engineering. He has a keen interest in data science and analytics, as well as a knack for designing IoT-based devices.



SAMIKSHA KHADKA

Leela is a final year student of Bachelor in Computer Science and Information Technology (B.SC.CSIT) studying in Padmakanya Multiple Campus affiliated to Tribhuvan University. Besides programming, She is also passionate about data analytics, keen-observation and in-depth-research.



SAROVAR BHANDARI

Sarovar is a 3rd year computer science undergrad student studying in Tribhuvan university. He aspires to create software that is genuinely helpful for everyone. When he is not coding or watching football, you will find him playing a game of chess or exploring nature.

Final Solution

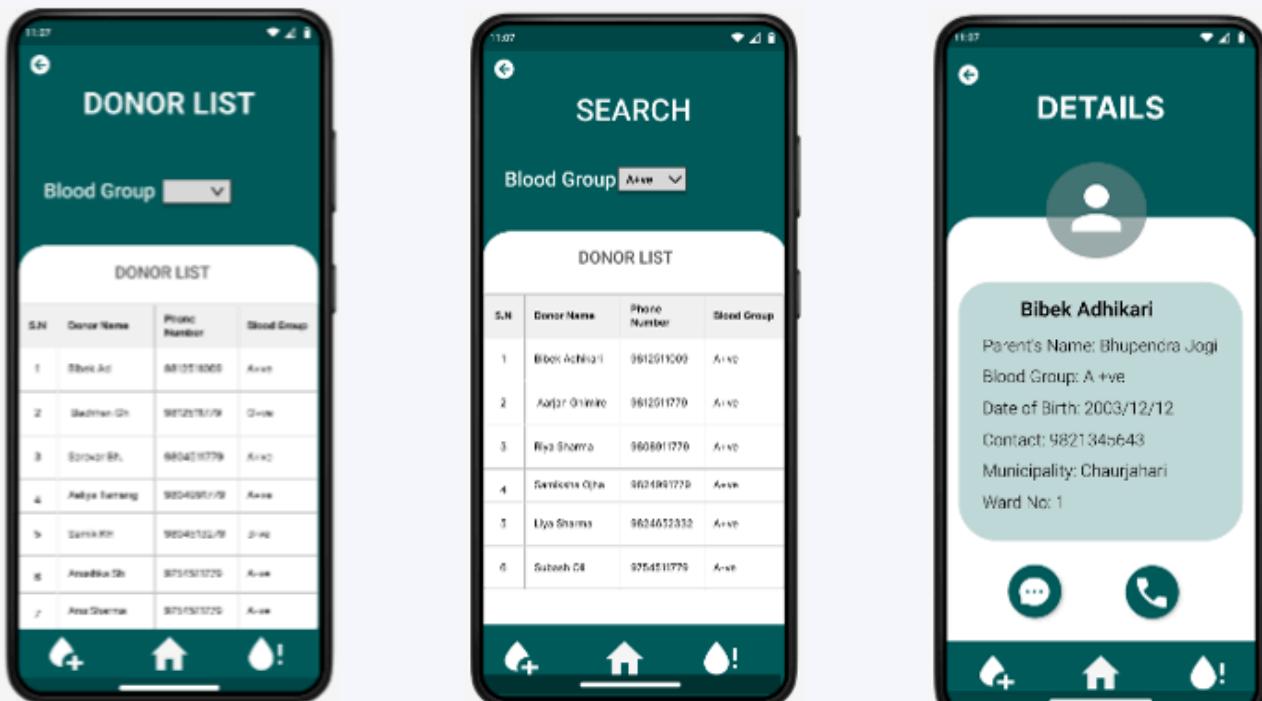
Filters:

BloodGroup: **Municipality:** **Ward:**

All Blood Groups Select Municipality Select Ward

Apply **Reset** **+ Add New Donor**

S.No	Donor	Blood Group	Last Donated	Phone Number	Municipality	Ward No	Emergency Contact	Actions
1	Sarover Bhandari	B-ve	05/07/23	9862133109	Chaujhari	3	9876543210	 
2	Sarover Bhandari	A+ve	12/08/23	1234567890	Chaujhari	3	9876543210	 
3	Sarover	A+ve	12/08/23	1234567890	Golbazar Municipality	18	9876543210	 
4	Sarover Bhandari	A-ve	06/11/23	9863320087	Golbazar Municipality	11	9828321873	 
5	Ranbeer Kapoor	O+ve	23/10/23	9861172978	Chaujhari	8	9861172978	 



DONOR LIST

Blood Group

DONOR LIST

S.N	Donor Name	Phone Number	Blood Group
1	Bibek Adhikari	9812345678	A+ve
2	Shivam Gh.	9812345678	O+ve
3	Sarover Bh.	9804567890	A+ve
4	Aditya Sharma	9804567890	A+ve
5	Sarika Bh.	9804567890	O+ve
6	Anubhav Bh.	9876543210	A-ve
7	Ana Sharma	9876543210	A-ve

SEARCH

Blood Group

DONOR LIST

S.N	Donor Name	Phone Number	Blood Group
1	Bibek Adhikari	9812345678	A+ve
2	Arijit Ghosh	9812345678	A+ve
3	Riya Sharma	9804567890	A+ve
4	Sambit Gh.	9804567890	A-ve
5	Uma Sharma	9824654321	A-ve
6	Sabesh Gh.	9854567890	A-ve

DETAILS



Bibek Adhikari

Parent's Name: Bhupendra Jogi
 Blood Group: A+ve
 Date of Birth: 2003/12/12
 Contact: 9821345643
 Municipality: Chaujhari
 Ward No: 1

PROJECT 5

SanghSangai

Sangh-Sangai, meaning “together” in Nepali, is a TearFund project in Nepal under a Scottish Government program working in disaster risk reduction, against gender based violence, health, community transformation & livelihood.



[**LEARN MORE ABOUT THIS PROJECT HERE**](#)



SanghSangai

Tearfund Nepal in partnership with Micah Nepal has been working on community development activities in rural parts of Nepal for more than 10 years. They are working on resolving issues like gender-violence, human-trafficking, child rights advocacy and many more. The impact of their works and activities are huge but there is a lack of proper system to properly measure overall as well as community specific impacts. Lack of effective insights for rural development initiatives lead to difficulty in assessing the well-being of communities and formulating data-driven strategies to resolve those issues.

We built a dashboard which helps to understand the health of the communities and report from various development activities happening in rural places of Nepal. This helps in making strategies and policies for nationwide development work. All the community specific information can be managed properly by the end users and leveraging this data, our system generates comprehensive reports and valuable insights, empowering stakeholders to make informed decisions for targeted development strategies.

"Overall, it was a good experience and we are enjoying the process. We're looking forward to collaborating within our team and bringing out the best in each other."

- SanghSangai Team

Meet The Team in NEPAL



ANUSHKA SUYAL

Anushka is a final year student in Computer science from Tribhuvan university. The Inspire internship has given her practical insights that go beyond her college studies, helping her develop a more professional approach to work.



AELIYA TAMANG

Aeliya is a recent graduate of Tribhuvan University. During his INSPIRE journey, he got to work on overall system development covering both front-end and back-end technologies. He is now more confident with his skills and plan to pursue a career as a full-stack developer with all the experiences he has gained so far.



RIYA SHRESTHA

Riya is a recent graduate of BSc. (Computing) from Islington College affiliated to London Metropolitan University. INSPIRE has boosted not only her technical skills but also her soft skills. She believes the skills that she has developed in these four months would be beneficial in her future career.



SUWAS DANUWAR

Subash is an undergraduate student of bachelor's in information technology from KIST College affiliated to Purbanchal University. The Inspire Internship helped him learn and develop skills in backend, database development, and project management. He is now confident in his skills to pursue a career in Full Stack Development.



INSPIRE Networking

Women Mixer events
sponsored by Michelle
Mahovlich and various
industry partners

A photograph of a woman with dark hair and glasses, wearing a dark hoodie, standing at a wooden podium and speaking to an audience. The audience is seated in rows of blue chairs, facing the speaker. In the background, a large projection screen displays a video of a man smiling. The setting appears to be a lecture hall or conference room.

Inspire No-Code Hackathon

Ideas hackathon for
neurodiversity inclusion and
social impact

[**LEARN MORE ABOUT THIS PROJECT HERE**](#)



On November 25th and 26th, 2023, at the ECS Building at UVic, the **first Inspire No-Code Hackathon** took place with the theme of neurodiversity and the challenge **“Improving the experience of neurodivergent students at university: can digital technologies offer solutions?”**.

No-code hackathons are also called ideathons: innovation marathons that involve lo-fi prototyping to solve a challenge. By not requiring coding, this type of hackathon is more inclusive to students from different subjects and focuses on presenting structured ideas for a technical, social or environmental need, whose digital solution can result in future projects or action plans. Thus, an ideathon works as an accelerator of new ideas and is an open innovation tool, which allows participants to be encouraged to find solutions through agile, collaborative and multidisciplinary teamwork!

Our Inspire No-Code Hackathon opened registrations for students from different years and subjects combined in teams to work collaboratively for 16 hours and develop ideas for digital solutions that improve the daily college life of neurodivergent students.

Neurodivergent people are those with Autism, ADHD, Down Syndrome, Obsessive Compulsive Disorder, Bipolarity, Intellectual Disability, Tourette Syndrome, Dyslexia and many other atypical conditions of neurocognitive functioning, facing daily challenges in their school years such as time management, teamworking, doing tasks, memory, concentration, social interaction, communication and more.

LED BY

CRIS LACERDA

Cris is Senior Educational Analyst at CESAR School and PhD student in Computer Science at UFPE (Brazil), she is autistic and a researcher on neurodiversity & agile methodologies and Haraway's cyborg-thinking. In 2018 and 2019 she was a finalist in the Creative Learning Challenge Brazil, promoted by the MIT Media Lab.

The hackathon featured 3 teams made up of students from Computer Science, Software Engineering, Mechanical Engineering, Civil Engineering and Maths. As a differential of this hackathon, which followed the steps of Design Thinking, students needed to include interviews with neurodivergent people in the Empathize phase, as well as not only validate the solution with real users in the Test phase, but from the beginning, also validate the problem statement with the target audience in the Define phase.



The Inspire No-Code Hackathon was organized by the Inspire Program with support from UVic SSD – Society for Students with a Disability, with neurodivergent people in all roles related to a hackathon - organization, participation, mentoring and jury – developing social impact solutions not just FOR neurodivergent people, but above all WITH neurodivergent people.



First place went to the Brain Teaser - Auto-Generative Quiz Platform solution, by students Pouria Tolouei, Mansahaj Popli and Ucheoma Okoma: an app for people with ADHD integrated with BrightSpace that proposes quizzes and drawings as a reward system, maintaining attention and dopamine generation when starting tasks in a new course.





Equity Diversity and Inclusion (EDI) Hub in the Faculty of Engineering and Computer Science

[LEARN MORE ABOUT THIS PROJECT HERE](#)



Through their research, 8 students in INSPIRE discerned a strong desire for change and a call to action regarding Equity, Diversity, and Inclusion (EDI) at the University of Victoria (UVic) in Spring 2022. Responding to this, two students continued the project in the fall, dedicated to enhancing the accessibility of existing EDI resources at UVic.. This endeavor led to the creation of an online reporting system for incidents of discrimination, sexualized violence, harassment, or bullying. Complementing this reporting system, a comprehensive resource webpage was also developed, centralizing all EDI resources available at UVic.

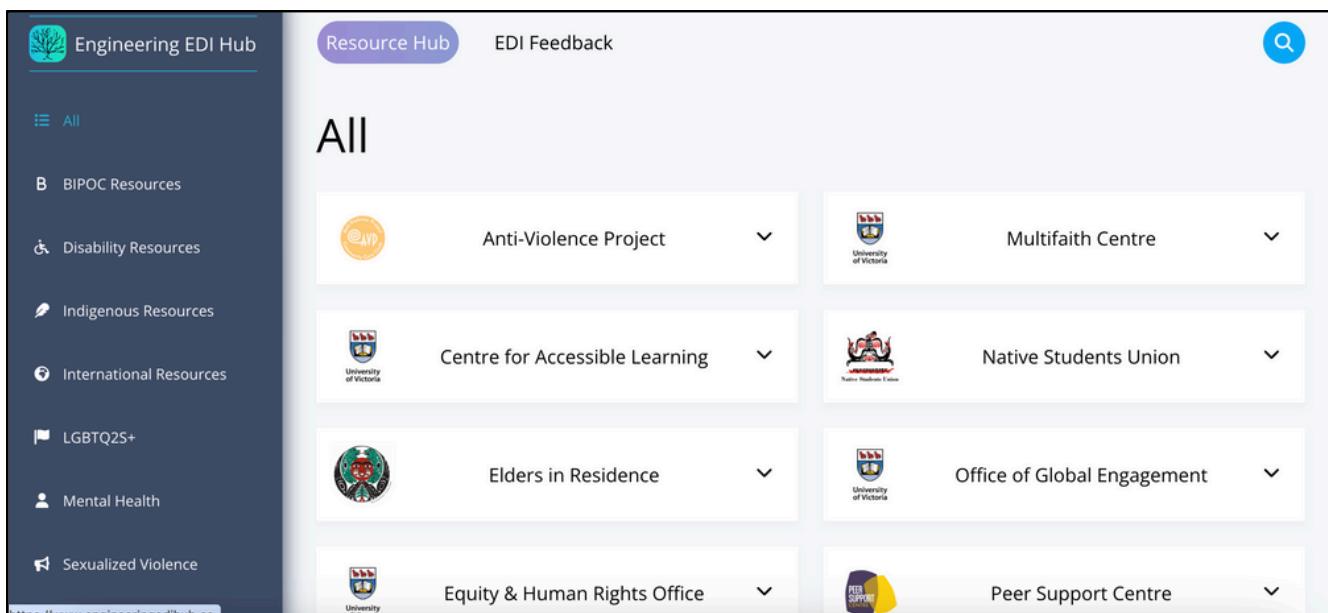
The development of these tools was marked by a deep commitment to empathy and user-centered design principles. Insightful feedback was gathered through student surveys and focus group discussions, allowing the INSPIRE team to keenly understand the needs of the student body. This process enabled the creation of tailored solutions that directly addressed these identified needs.

One of the primary outcomes of this initiative was the EDI Helpline and Resource Hub. This innovative platform was successfully developed by an INSPIRE intern, Molly Craig and launched in December 2022 within the Faculty of Engineering and Computer Science at UVic. The Helpline serves as a pivotal point of contact for students seeking support and guidance on EDI-related issues, while the Resource Hub offers a wealth of information and tools to foster a more inclusive and equitable campus environment.

The project's success was largely attributed to its inclusive design process, ensuring that the solutions developed were not only effective but also resonant with the experiences and expectations of the students. The EDI Helpline and Resource Hub have since become integral components of UVic's commitment to fostering a diverse and inclusive academic community, particularly within the Faculty of Engineering and Computer Science.

The 8 team members from Spring 22 were: Nowshin Nawar Arony, Kezia Devathasan, Jena Wheeldon, Payton Chernoff, Aikaterini Tavri, Calem Bardy, Jenna Mehlmann, and Kyle Clancy. The continuing students from Fall 2022 were Kezia Devathasan and Molly Craig

The project's impact extended beyond immediate solutions. It served as a catalyst for broader conversations and actions around EDI at UVic. The final development members on this project, Kezia Devathasan and Molly Craig were invited to present at the EDI committee meeting for the Faculty of Engineering and Computer Science, and present their research results, many of which surprised members of the committee. It demonstrated the power of student-led initiatives in driving institutional change and set a precedent for future endeavors in this vital area. The adoption of the EDI Helpline and Resource Hub by UVic's Faculty of Engineering and Computer Science marks a significant step forward in their ongoing efforts to create a more inclusive and supportive educational environment for all students.



The screenshot shows the 'Resource Hub' section of the Engineering EDI Hub website. The left sidebar lists categories: All, BIPOC Resources, Disability Resources, Indigenous Resources, International Resources, LGBTQ2S+, Mental Health, and Sexualized Violence. The main content area displays a grid of resource cards. Each card includes an icon, the resource name, and a dropdown arrow. The cards are arranged in two columns. The first row contains 'Anti-Violence Project' (with a @AVP icon) and 'Multifaith Centre' (with a University of Victoria logo icon). The second row contains 'Centre for Accessible Learning' (with a University of Victoria logo icon) and 'Native Students Union' (with a Native Students Union logo icon). The third row contains 'Elders in Residence' (with a University of Victoria logo icon) and 'Office of Global Engagement' (with a University of Victoria logo icon). The fourth row contains 'Equity & Human Rights Office' (with a University of Victoria logo icon) and 'Peer Support Centre' (with a Peer Support logo icon).



YOUTH ENGAGEMENT





INSPIR
STEM for Soci
Impa

From Middle and High-school
to UVIC!

Empowering students at the
Westmont Design Challenge



[**LEARN MORE ABOUT THIS PROJECT HERE**](#)

Organized by the Westmont Montessori School, the **Westmont design challenge competition** seeks to inspire students in grades 7-11 from across North America. This competition encourages multi-age teams, collaboration, and creativity. The primary focus lies on fostering teamwork, emphasizing the process, ideation, and presentation rather than the final idea. Distinguished national experts and notable judges evaluate the presentations, with the competition's theme changing annually.

The winning team is awarded scholarships for their educational aspirations, supported by a dedicated, long-term donor. Additionally, the second and third-place teams also receive recognition and support. A number of **exceptional projects may have had the opportunity to present their design concepts to the INSPIRE: STEM for Social Impact program at UVIC in mid-2023 and collaborate with the INSPIRE Apprentice Garage Team to develop a Minimum Viable Product alongside the community of interest.**

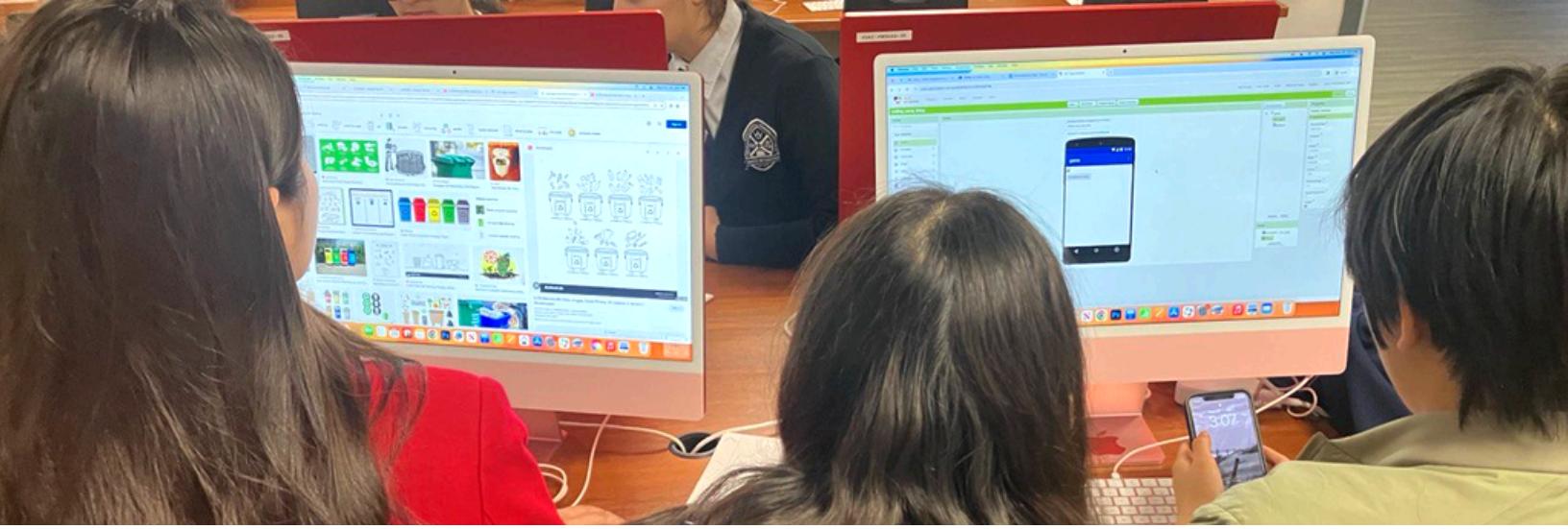
This year, **INSPIRE awarded two teams from the Westmont competition this opportunity: one from Shawnigan Lake School, and the other from St. Margaret's Secondary School.** Respectively, the two projects were: Rainwise and IndigenUS (later called Bridging Roots). These projects aimed to provide water reserves for times of drought to local communities, and create an educational app to teach others about Indigenous territories.

The high school students from both Rainwise and IndigenUS worked closely with UVIC Inspire teams for the 4 month semester, co-designing their solutions, and acted as liaisons to other community partners for the projects. The involvement of high school students in both of these projects was empowering, and helped introduce engineering-based experiential learning opportunities into the Victoria BC secondary education system.



Empowering Tomorrow's Innovators:
Inspiring Change Through Youth-Led
Software Development Workshops

[**LEARN MORE ABOUT THIS PROJECT HERE**](#)



Embarking on the journey of addressing societal issues through technical solutions is not just a university-level experience; it's a mindset we should instill in students from an early age. Recognizing this, **we brought the innovative concept of "Inspire" to two schools in Victoria (Claremont's Institute for Global Solutions and St.Margaret's School), aiming to showcase the incredible possibilities that computer science and software development offer.**

In the workshop "Computing & Sustainability," approximately 60 students engaged weekly in teams of 3 to 4 from September to December 2023, navigating the entire software development process. Guided by the methodology of design thinking, students progressed through phases such as empathizing, problem definition, ideation, and prototyping, ultimately developing their own apps using the MIT App Inventor. All of this was done against the backdrop of exploring how software can address sustainability challenges in our community and globally.

The creativity unleashed by the students is truly inspiring, with apps designed to enhance safety for women and kids in public spaces, facilitate student volunteering for ocean cleanups, simplify volunteering processes for busy young individuals, aid those facing poverty in Downtown Victoria, support criminal record rehabilitation, educate hospitalized children about health and environmental awareness, power classrooms with solar panels, and even teach kids about recycling through an engaging game. Beyond achieving creative and technical learning objectives, students also gained crucial teamwork skills. They learned how to collaboratively develop and implement ideas, dispelling potential stereotypes about computer science as an individual pursuit. Through this hands-on experience, students were holistically nurtured, potentially enhancing their sense of self-efficacy.

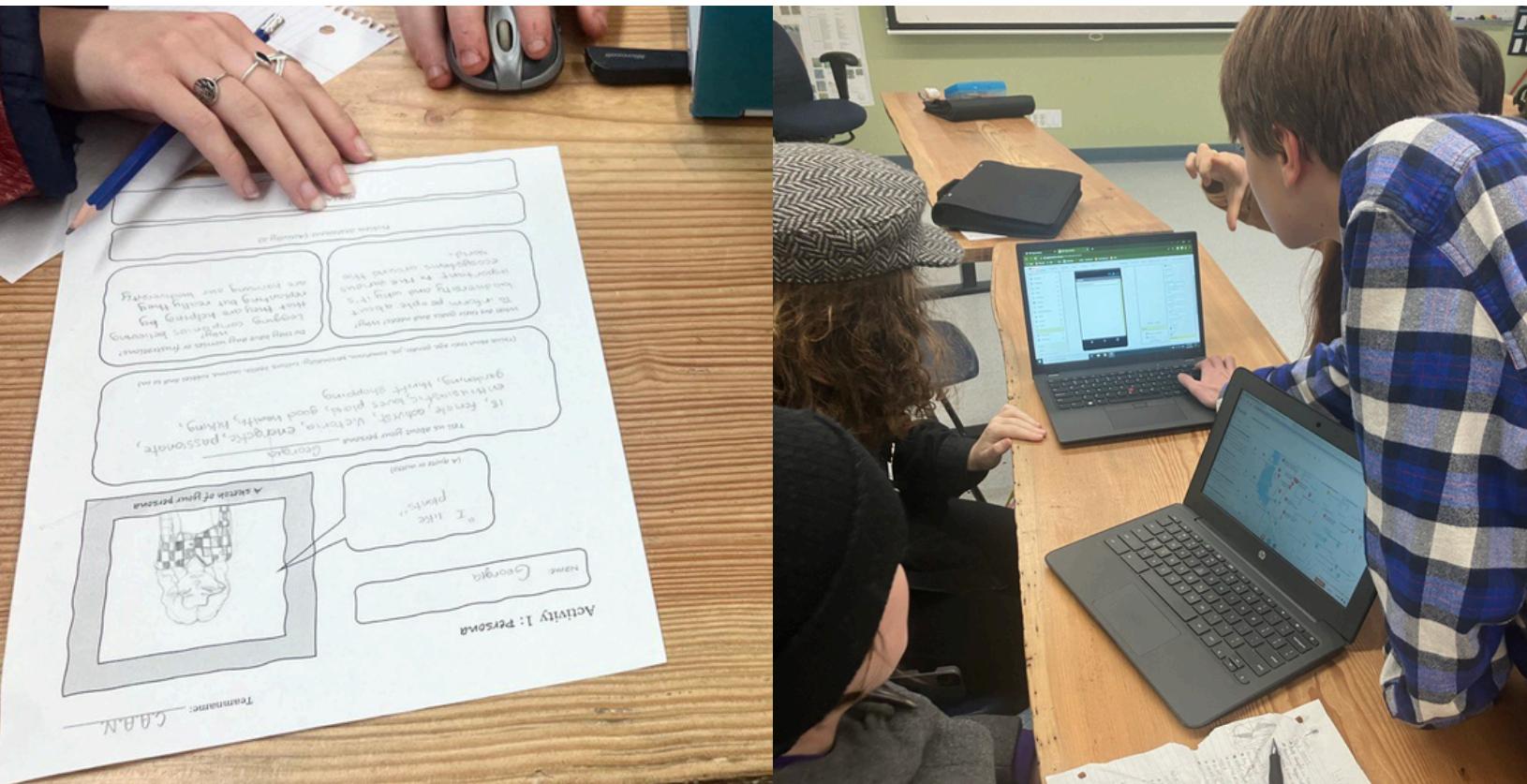


LED BY

ISABELLA GRASSL

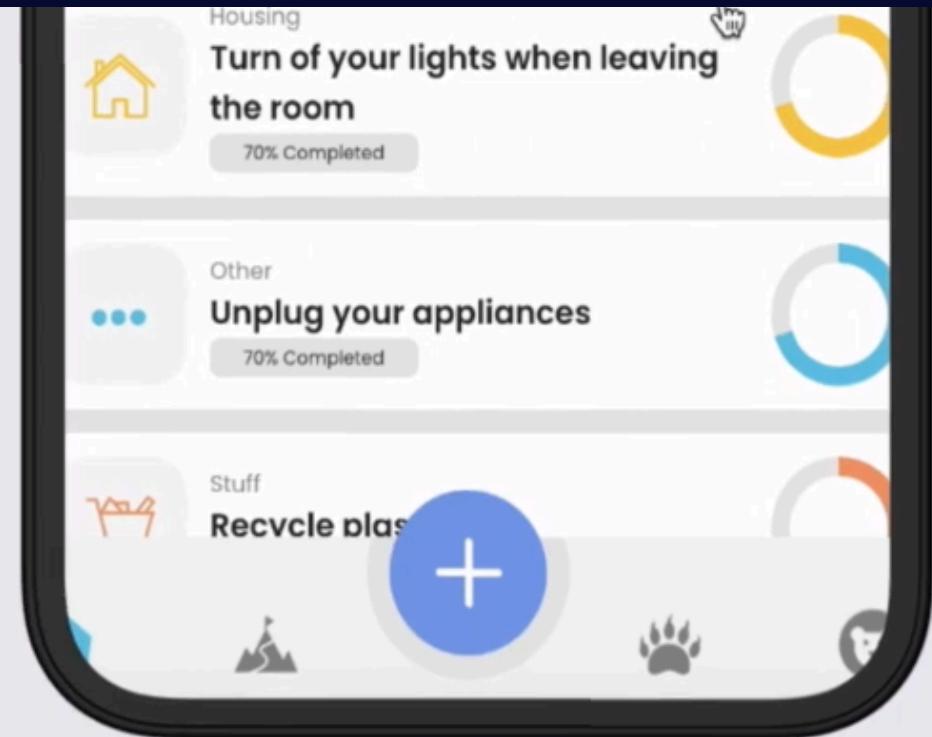
Isabella is a PhD student at the Chair of Software Engineering II (Prof. Dr. Gordon Fraser) at the University of Passau, Germany. Her research topic is about social and collaborative aspects of software development with regard to various aspects of diversity. As a visiting researcher at Inspire, she is exploring how diverse perspectives impact team dynamics in student teams as well as promoting creative and social facets of software development to school kids, aiming to encourage their interest in computer science.

These workshops not only equip students with technical skills but also instill in them the belief that they can be active contributors to positive societal change through the transformative power of technology. By fostering a collaborative and innovative mindset, we're shaping the next generation of tech-savvy problem solvers and societal change-makers.



ClimAct

A gamified approach to tracking users' carbon footprints and suggesting attainable, fun challenges to make climate change action feel more feasible to our youth.



[LEARN MORE ABOUT THIS PROJECT HERE](#)



In a sustainability challenge, a group of four students hatched a novel concept: transforming climate action into an engaging game. This idea gave birth to **ClimAct, a mobile application designed to inspire young people to engage in tailored activities that promote a sustainable way of life**. The app features a carbon footprint calculator that enables students to gauge their environmental impact and earn rewards for undertaking activities aimed at reducing their carbon footprint. During the summer of 2022, the ClimAct team under the Inspire initiative undertook comprehensive user research at four local schools, aiming to craft an app that would actively engage young people in combating climate change. Collaborating with Claremont Secondary School, Westmont Montessori School, Ecole Victor Brodeur, and Glenlyon Norfolk School, the team engaged with over 200 high school students. A distinctive aspect of this project was the team's approach of co-creating the app with students rather than just designing it for them. This collaborative process of iterative design and research culminated in a highly praised Minimum Viable Product (MVP), which gained acclaim from local educators and sparked community discussions about youth involvement in climate action.

The app's reception was so favorable that these schools have decided to incorporate it into their high school curriculum. As a result, the ClimAct team is now actively testing the app's live version in educational settings to ensure it fulfills its educational objective and provides teachers with sufficient functionalities. The app is particularly integral to the Institute for Global Solutions (IGS) program at Claremont Secondary, designed for students keenly interested in global sustainability issues. INSPIRE members have interacted extensively with the roughly 50 IGS students; co-designing the app with them, and working to integrate it into their education in a meaningful way.

Second Year End Conference, Dec 14, 2023





The **INSPIRE Program's Year-End Conference**, held on December 14 2023, marked a significant culmination of a year dedicated to fostering practical learning experiences in the field of engineering. This event was not just a showcase but a vibrant confluence of ideas, ambitions, and real-world problem-solving. Students, who had been engaged in experiential learning projects throughout the year, had the unique opportunity to present their innovative solutions to challenges posed by our community partners. These partners, key figures from local industries and organizations, not only provided the real-life contexts for these projects but also contributed their expertise and insights during the industry panels. The conference was further enriched by the presence of high school students from STEM programs, who brought fresh perspectives and showcased their budding talents. The event's goals were manifold: to bridge the gap between theoretical knowledge and practical application, to foster networking and collaboration between students and industry leaders, and to inspire younger generations to pursue careers in STEM fields. The Year-End Conference of the Inspire Program stood as a testament to the power of partnership, mentorship, and the unyielding spirit of innovation that thrives when academia and industry unite for a common purpose. Visit [here](#) for a short summary of this wonderful networking event.



THANK YOU

"I have thought about creating a program such as INSPIRE for many years. While this has been wonderful to dream about, I cannot put into words how exciting it is to see the vision of this program become a reality. I sincerely thank our students, ambassadors, mentors, community partners, and supporters for helping me create something amazing at the University of Victoria, and beyond."

- INSPIRE Director

"We reinforced our commitment to using technology for social impact and emphasized the importance of empathy and adaptability in addressing real-world challenges."

- INSPIRE Students

"We would like to thank our program supporters, for their incredible support in the first year of the Inspire program. Your contributions have made it possible for our students to create projects that will impact countless community members, and for our students to embrace the power of this interdisciplinary, experiential learning process. You have provided mentorship, opportunity, and given many students at the University of Victoria the confidence and skills they need to become successful in their STEM careers."

- INSPIRE Executive Team