INSPIRE Program

STEM for Social Impact

2025 Program Report

PREPARED BY: JAYANI SAMARAWEERA

STEM for Social Impact

Global Expertise and Experiential-Learning:
The Next Frontier in Technology Research and Education for a Diverse World

In Canada   In Nepal   In Singapore

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 **Canadian and Asia-Pacific 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 fourth year of INSPIRE featured the 2025 Apprentice Garage Program and a three-stage hackathon series that included an ideathon, an implementation sprint, a project showcase with testing, and a bug-bounty competition. The Apprentice Garage program facilitated four **experiential-learning projects in Victoria, BC, Canada and Kathmandu, 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 **innovative research opportunities**
- 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

VISIT US AT: **WWW.INSPIREUVIC.ORG**

DR. DANIELA DAMIAN
PROFESSOR & ECS-CAPI CHAIR OF INCLUSIVE SCIENCE, TECHNOLOGY & ENGINEERING
UVIC

Our Ideology

INSPIRE is an innovative technology hub dedicated to harnessing **community-based research** and cutting-edge tools to create inclusive and **equitable tech solutions** for a diverse, sustainable future. By bringing together multicultural and multidisciplinary teams, INSPIRE fosters collaboration that addresses real-world challenges through emerging technologies and shared expertise. Through hands-on, experiential learning and meaningful community engagement—both locally and globally—INSPIRE promotes mutual respect, reconciliation, and inclusive relationships. This approach ensures that our technology-driven strategies not only reflect the richness of diverse perspectives, but also contribute to building resilient, sustainable societies for everyone.

INSPIRE Program Sponsors

INSPIRE's financial sponsors, educational, and community partners 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 on of our sponsors.

PARTNERS

EDUCATIONAL

COMMUNITY
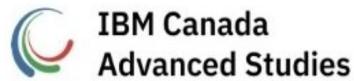
Global Expertise and Experiential-Learning STEM Education for a Diverse World

Inspire
&
UVIC Strategic Goals

ʔetalnəw̓əl̓ | ÁTOL,NEUEL

INSPIRE embodies UVic's principle of **ʔetalnəw̓əl̓ | ÁTOL,NEUEL** through a commitment to respectful, community-guided collaborations that uphold Indigenous rights and perspectives in lasting, tangible ways. By partnering with Indigenous communities in Tuktoyaktuk and Victoria, INSPIRE takes a holistic approach to reconciliation—*impactfully sharing resources, ensuring sustainable services, honoring cultural sovereignty, and taking responsibility for transformative engagement.*

Sharing:
From 2023 to present, Inspire has had the privilege of working with Indigenous communities, At Mangilaluk School in Tuktoyaktuk, NWT, INSPIRE has co-created Bridging Roots, an app that preserves and **promotes the Inuvialuktun language and culture** for younger generations. By researching culturally grounded teaching tools, INSPIRE facilitates ongoing language learning and strengthens local identity. In Victoria, INSPIRE hosts events where Elders, Knowledge Keepers, students, and staff exchange teachings on reconciliation and cultural revitalization, making Indigenous perspectives an integral part of the university community.

Ensuring:
Staying power is a core value of INSPIRE's work. Bridging Roots exemplifies this by involving local teachers, Elders, and youth in app updates, ensuring it remains relevant to community needs over time. For students at UVic—both Indigenous and non-Indigenous—INSPIRE offers internships and course-based projects focused on reconciliation, preparing them to support Indigenous programs and services well into the future.

Honouring:
By centering local Elders and educators , language, and community, in project development, INSPIRE respects each community's autonomy, traditions, and language rights. In Tuktoyaktuk, prioritizing Inuvialuktun preserves cultural sovereignty, while in Victoria, acknowledging Lekwungen and W̱SÁNEĆ territories fosters genuine relationships built on trust. Our work done with Bridging Roots is in partnership with the Indigenous Perspectives Society (IPS). **These reciprocal partnerships deepen cultural competency and help UVic integrate Indigenous knowledge across its curricula, and campus life.**

Taking Responsibility:
INSPIRE's co-creative, community-led approach models institutional accountability. Instead of a one-sided or top-down strategy, the program ensures Indigenous voices inform decision-making and guide new initiatives. Through dialogue, workshops, and sustained partnerships, INSPIRE integrates reconciliation into the university's very structure, championing ʔetalnəw̓əl̓ | ÁTOL,NEUEL as a continuous and shared responsibility.

People, Place & Planet

From empowering youth to tackle climate challenges, to enabling individuals with brain injuries to find essential support, to synchronizing services for those experiencing homelessness or domestic violence, INSPIRE's initiatives exemplify UVic's commitment to **People, Place & the Planet.** By uniting inspiration, inclusion, direct action, and shared innovation, these projects demonstrate how universities can champion healthier, more resilient communities.

1. Inspiring & Activating
INSPIRE ignites purpose across students, faculty, and community partners, motivating them to address urgent local and global concerns. Through projects like Climact, youth learn to cope with climate anxiety by combining mental health support with environmental awareness. This workshop-based model engages participants directly in designing solutions to climate challenges, illustrating the power of critical thinking and collective action. INSPIRE's reach extends **beyond Victoria**, with similar initiatives in Nepal focusing on disaster response and rural healthcare, ensuring global impact.

2. Including & Supporting
Building equitable communities requires embracing diversity and ensuring services meet people's unique needs. INSPIRE's work with the Victoria Brain Injury Society (VBIS) showcases how accessible digital tools—co-created with individuals who have brain injuries—can restore autonomy and dignity. By centering those with lived experience in the design process, INSPIRE proves that true innovation emerges when everyone's voice is heard and valued.

3. Addressing
INSPIRE sheds light on system-level barriers that perpetuate societal inequities. Herluma, a project in both 2022 and 2024,for example, connects local shelters to provide comprehensive support for individuals facing homelessness and domestic violence. By streamlining data and communication, Herluma unearths gaps in resources and coordination, paving the way for policy changes aligned with UVic's principles of equity and accountability.

4. Developing & Sharing
Collaboration, continual refinement, and knowledge exchange lie at the heart of INSPIRE. Projects such as Herluma, VBIS, and Climact evolve over time to broaden their reach and efficacy. Through partnerships with community leaders, service providers, and international institutions, INSPIRE amplifies the impact of each initiative—**extending UVic's dedication to research that improves social and environmental well-being across the globe.**

Culture of Change
& Transformation

By forging interdisciplinary ties across faculties and nurturing reciprocal relationships with remote Indigenous communities and global partners, INSPIRE exemplifies a **Culture of Change & Transformation.** Supporting collaboration, Fostering adaptable innovations, Creating an inclusive atmosphere, and Embracing risk-taking, INSPIRE drives meaningful shifts in both university learning and broader community problem-solving.

1. Supporting
INSPIRE unites **students and researchers from diverse faculties**—Science, Business, Social Sciences, and beyond—to co-develop real-world solutions. Course projects, co-op placements, and research opportunities ensure participants gain hands-on experience while sharing knowledge across disciplines. This interconnected approach bolsters both academic excellence and community well-being.

2. Fostering
Flexibility underpins INSPIRE's global reach and research, from language revitalization with remote Indigenous communities to international industry and university partnerships. Adaptive governance and resource use encourage creative policymaking, enabling INSPIRE to respond effectively to varied cultural and logistical contexts.

3. Creating
INSPIRE cultivates a culture of trust and inclusivity, drawing a diverse array of applicants committed to tackling complex issues. By emphasizing respect, collaboration, and mutual learning, the program welcomes a broad spectrum of perspectives and skill sets, leading to richer, more impactful outcomes.

4. Embracing
Risk-taking and experimentation are fundamental to INSPIRE's ethos. Pilot initiatives, such as Neurovation, demonstrate how innovative solutions can be tested, refined, and expanded. By viewing challenges as opportunities for growth, INSPIRE encourages a mindset that drives breakthroughs—reshaping institutional practices and fueling community-wide transformation.

Partnering for a Shared Future

By cultivating open, reciprocal relationships, Transforming internal systems to better serve partners, Responding to diverse community needs, and Advancing interdisciplinary research, INSPIRE fully embodies UVic's vision of **partnering for a shared future.** Grounded in mutual respect, these collaborations bring together the strengths of all involved to tackle today's complex social and environmental challenges.

1. Cultivating

INSPIRE engages with local and **global stakeholders and researchers**—including community organizations, Indigenous communities, industry partners, and other **academic institution**s—through co-creation. By prioritizing shared decision-making and mutual respect, INSPIRE builds authentic, sustainable relationships. Regular events and conferences further strengthen these bonds, keeping partners informed about student-led projects and inviting new collaborators into the network.

2. Transforming

INSPIRE reimagines university operations to better support **community-engaged research.** Tailored protocols—such as flexible co-op arrangements for industry partners or remote research agreements with Indigenous communities—reduce barriers and foster two-way learning. By offering part-time, full-time, and volunteer opportunities (even for high-school students), INSPIRE ensures diverse engagement. This cross-departmental coordination creates an ecosystem where reciprocal partnerships can flourish long-term.

3. Responding

At the heart of INSPIRE is active listening and adaptability, recognizing that social and environmental challenges are always evolving. **Beyond research support and student expertise,** INSPIRE connects its partners to broader networks of funding, knowledge, and resources. Whether linking nonprofits with global contacts or introducing remote Indigenous communities to parallel projects, INSPIRE ensures mutual benefit and knowledge exchange that drive meaningful solutions.

4. Advancing

INSPIRE brings together students and faculty from a wide range of fields—engineering, business, social sciences, humanities, and more—to address complex issues through fresh, collaborative perspectives. Graduate students, in particular, contribute specialized research skills that spark dialogue and drive innovative discoveries. By merging academic disciplines to design impactful software or develop community-based programs, INSPIRE shapes creative works and service solutions that extend well beyond UVic's campus, reinforcing the university's commitment to real-world impact.

Approach to research and Innovation for Societal Impact

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**
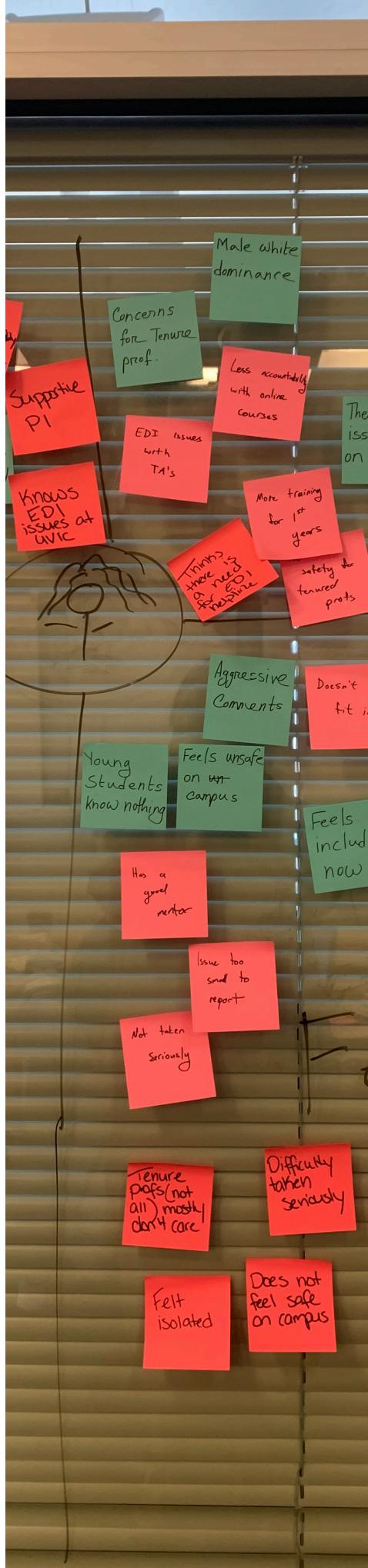
Our Advisory Board

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 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.

Meet the 2025 Exec Team & Ambassadors

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 innovative, and impactful research opportunities,** 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 leads Inspire as the program manager, and is currently pursuing a PhD in Computer Science. A dedicated educator at heart, she channels her love of teaching into every aspect of her work, delivering engaging lectures, workshops, and hands-on sessions that bring complex technical concepts to life. Kezia's mentorship style emphasizes collaboration and confidence-building, ensuring students feel supported and empowered to explore new ideas. With publications in software engineering education and collaborative software development, she applies evidence-based practices to create dynamic, inclusive learning environments. Kezia's research in team dynamics further shapes her approach, helping her design initiatives that foster effective communication and joint problem-solving.

JAY SAMARAWEERA

Jay supports Inspire through teaching and guiding assistance, She is currently a PhD student in Computer Science. She brings valuable industry experience and, mentorship, helping students develop practical skills and gain industry-like experience within Inspire.

BACHAN GHIMIRE

Bachan, is our program manager for INSPIRE Nepal and is currently working as a research affiliate with Dr. Daniela Damian at UVic, where he is studying software ecosystems and community engaged software development methodologies. 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 community partners and sponsors to partially support the program in Nepal. He recently concluded the 3rd year of INSPIRE in Nepal in 2024 and is working with Dr. Damian to expand INSPIRE's efforts in Asia Pacific region. Given the apparent socio-economic barriers to the adoption of digital innovation in South & Pacific region in Asia, Bachan is committed to making contributions both scientifically and within the community through research and technical innovation for community development.

Our Program Collaborators and Mentors

Collaborators

Thank you to our industry and academic collaborators from partnering organizations who worked closely with the Apprentice Garage teams throughout the program. Their contributions, from sharing domain knowledge to supporting research, design, and technical decision-making, helped ensure each project was grounded in real-world needs.

SEX̱SOX̱ELWET, Lorelei McEvay, SENĆOŦEN teacher at Bayside Middle School

Kim Graves, Vice-Principal at Bayside Middle School

Darcy Mcnee, Saanich School District Teacher Leader

Abby Brooks, Speech and Language Pathologist, Bayside Middle School

Raaj Chaterjee Meaningful Team Vancouver

J.P. Gahatraj ED at MCDS Nepal

Collaborators

Garry Sagert
Senior Director, UVic
Online Systems

Craig Scharien
Associate Director,
Academic
Technologies and
Integration

Shailoo Bedi
Executive Director,
Learning and Teaching
Innovation

Roberto A. Bittencourt
Assistant Professor,
UVic

Anthony Estey
Assistant Professor,
UVic

Allyson Hadwin
Professor, UVic

Practitioner Mentors

We extend our sincere gratitude to the mentors who guided our students through every stage of their project journeys. Their one-on-one and team-based support helped students navigate project pivots, manage complex phases of development, and refine their presentations. Their dedication, encouragement, and expertise played an essential role in shaping the students' growth and confidence.

Jessica Vandenberghe

Norma Hogan

Sonya Bird

Kate Kinnear

Nicole Peverly

Practitioner Mentors

Ujjwal Shrestha

Pream Shilwal

Karun Panta

Saman Rahbar

Nitin Gupta

Reed Mcilwain

Our Apprentice Garage Projects

The 2025 Apprentice Garage Program included 26 students between the ages of 18 and 25, representing fields such as Software Engineering, Computer Science, Geography and business. Participants are from the University of Victoria (Victoria, British Columbia), the University of Waterloo (waterloo, Ontario), as well as exchange students from Singapore Management University. We also have a remote student team from Nepal.

The cohort reflected a diverse range of backgrounds, including Asian, Black, and White students, with both international and domestic participants from Canada, Singapore, and Nepal. Throughout the program, students collaborated with four community partners on projects related to education, community support, truth and reconciliation, and equity, diversity, and inclusion (EDI) at UVic.

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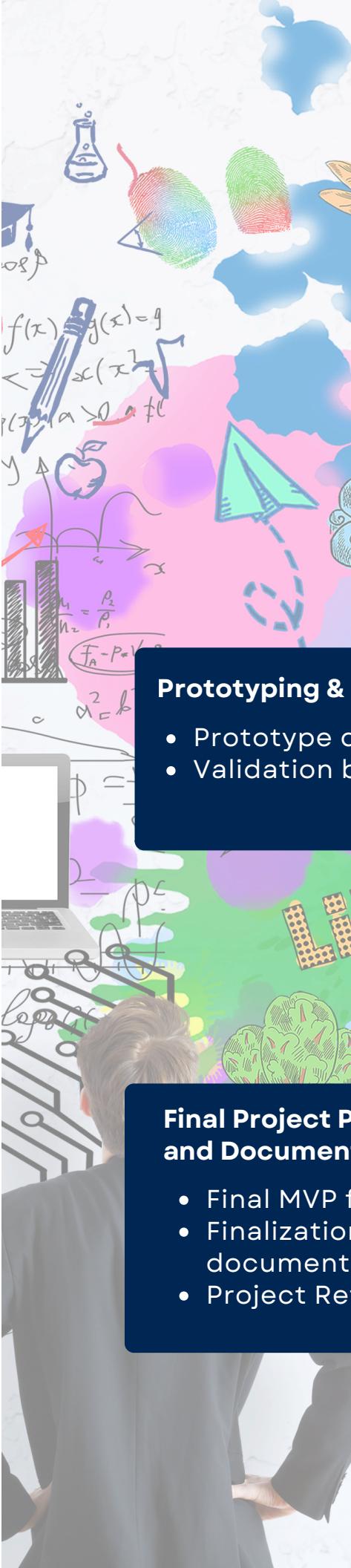
The Apprentice Garage projects evolve over 4-months and are essentially team-based opportunities for community-driven research and innovation involving undergraduate students. They work over 4 consecutive stages to fully explore society impactful problem as well as create inclusive scalable minimum-viable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

1
SEPTEMBER

Problem Identification & Validation

- Program Launch
- **Exploratory Research**

Prototyping & Testing

- Prototype development
- Validation begins

2
OCTOBER

3
NOVEMBER

Testing & Refinement

- Project Presentations
- MVP development

Final Project Presentations and Documentation

- Final MVP fixes
- Finalization of project documentation
- Project Reflections

4
DECEMBER

Bridging Roots W̱SÁNEĆ

Continuing from Bridging Roots Tuktoyaktuk, this team worked to expand the platform for Bayside Middle School while also modularising it so it can be adapted for other Indigenous languages in the future.

Bridging Roots W̱SÁNEĆ

Bridging Roots builds on earlier **community-driven language revitalization** work that revealed two key challenges: limited daily exposure to Indigenous languages for young learners and a lack of engaging, culturally grounded digital tools for educators. The project began in Tuktoyaktuk with a platform co-created alongside Mangilaluk School to support Inuvialuktun, and later expanded to Bayside Middle School to support SENĆOŦEN learners. Across both communities, the work has remained rooted in collaboration, cultural guidance, and respectful co-design.

By **researching key needs through classroom visits, interviews, and ongoing collaboration** with educators and community members, Bridging Roots seeks to offer an accessible, interactive platform that reflects Indigenous knowledge systems. Through this platform, learners can explore **gamified activities, interactive stories, a community dictionary, and a cultural map** that highlights culturally significant places and reinforces land-based learning.

The result is a supportive digital environment that strengthens language transmission and classroom engagement. Bridging Roots focuses on **engaging learning tools, community-approved content, shared language resources, and real connections** to place, helping Indigenous communities preserve and revitalize their languages in meaningful, practical ways.

"This project taught us that building for a community starts with listening. The more time we spent in classrooms, the clearer it became that real impact comes from understanding what students and teachers actually need."

- Bridging Roots W̱SÁNEĆ Team

Meet The Team

TOM JING

Tom is a Computer Science graduate driven by a deep appreciation for language and communication. As a developer who has grown with BridgingRoots from the very beginning, he now stewards the technical direction in close partnership with his teammates. He thrives in the collaborative environment, using his background in modern tech stacks to co-create solutions for the Inuvialuktun and SENĆOŦEN chapters. Tom is dedicated to building accessible, user-first platforms that help preserve and celebrate Indigenous languages.

NEHA D/O RAM SINGASAN

Neha is a Computer Science student driven by a commitment to community impact and meaningful technology. As the backend lead for BridgingRoots, she helped build the platform supporting Indigenous language learning in SENĆOŦEN. She thrives in collaborative, purpose-led teams and brings a user-first mindset to every system she designs. Guided by empathy and creativity, Neha focuses on developing accessible, practical tools that empower communities and genuinely help people.

KANDASAMY KAYALVIZHI

Kayalvizhi is an Information Systems student from Singapore Management University. Through weekly visits to Bayside Middle School, she learned about the W̱SÁNEĆ peoples, their classrooms, and what language revitalization looks like in practice. She helped turn those insights into features for the Bridging Roots platform. INSPIRE has been both a cultural learning experience and a chance to contribute to meaningful, real-world Indigenous language education.

NISHANT SAI CHALLA

Nishant is a Computer Science and Mathematics student, driven by a passion for creating technologies that improve people's lives. With a strong background in software development, research, and analytical problem-solving, he approaches his work with purpose and with a commitment to building accessible, human-centered solutions. Looking forward, Nishant plans to start his own startup, where he hopes to apply his skills and empathy to develop meaningful products that address real-world needs and make a positive impact on communities.

Meet The Team

MANYA GOEL

Manya is a dedicated and driven computer science and data science student who is passionate about using their technical skills to create tools that help communities. Through meaningful partnership with the W̱SÁNEĆ Nation, they brought a listening-first approach to co-creating a SENĆOŦEN language learning app. She leverages data-driven insights while centering community voices to create impactful, human-centered solutions.

JJ CRUIKSHANKS

JJ is a 4th year Computer Science student from the University of Victoria that's passionate about using technology to benefit his community. He's been excited to work with educators and use his technical background to help students in the classroom. He's hoping to bring the experience of this project going forward to continue building platforms and technology that help those in his community.

LEEZA SHEWCHENKO

Leeza is a 4th year Computer Science & Geography (Geomatics) student who's passionate about using technology to support communities. With a background in the Social Sciences, she bridges technical innovation with real human needs, designing tools grounded in cultural and geographic context. She believes technology should be centred around community voices. Leeza is committed to building impactful solutions and partnerships that make meaningful differences.

Our Solution
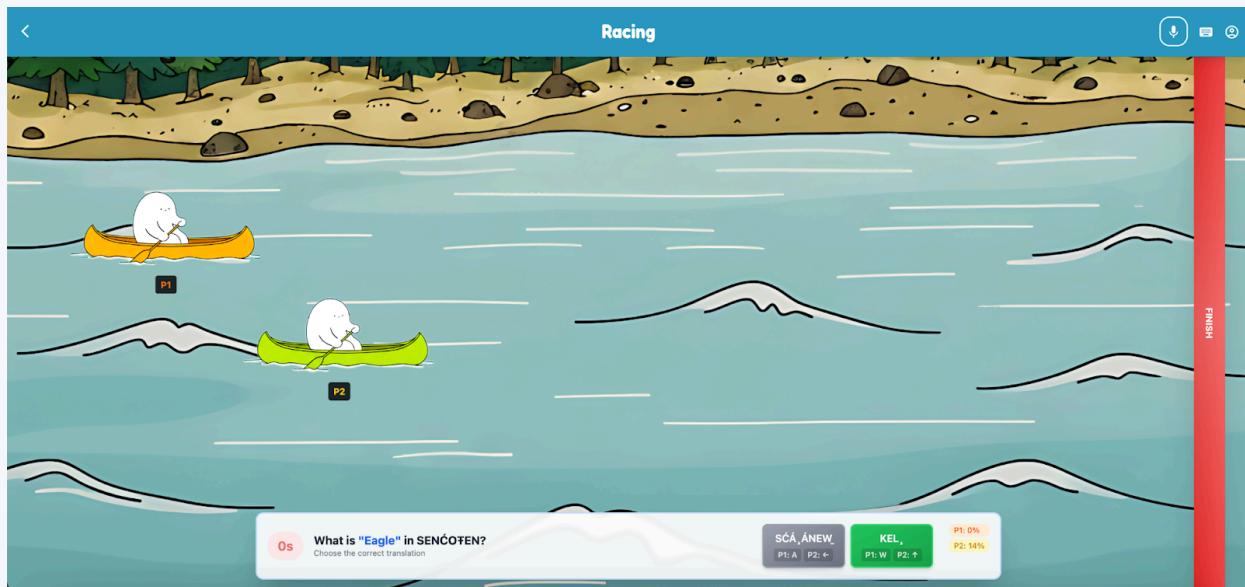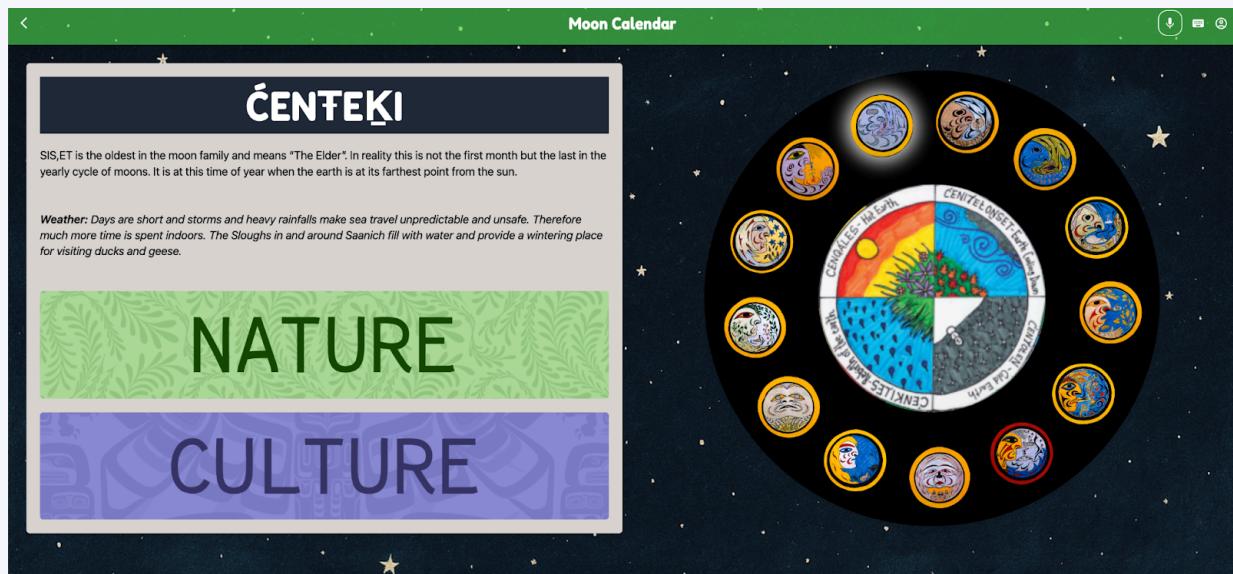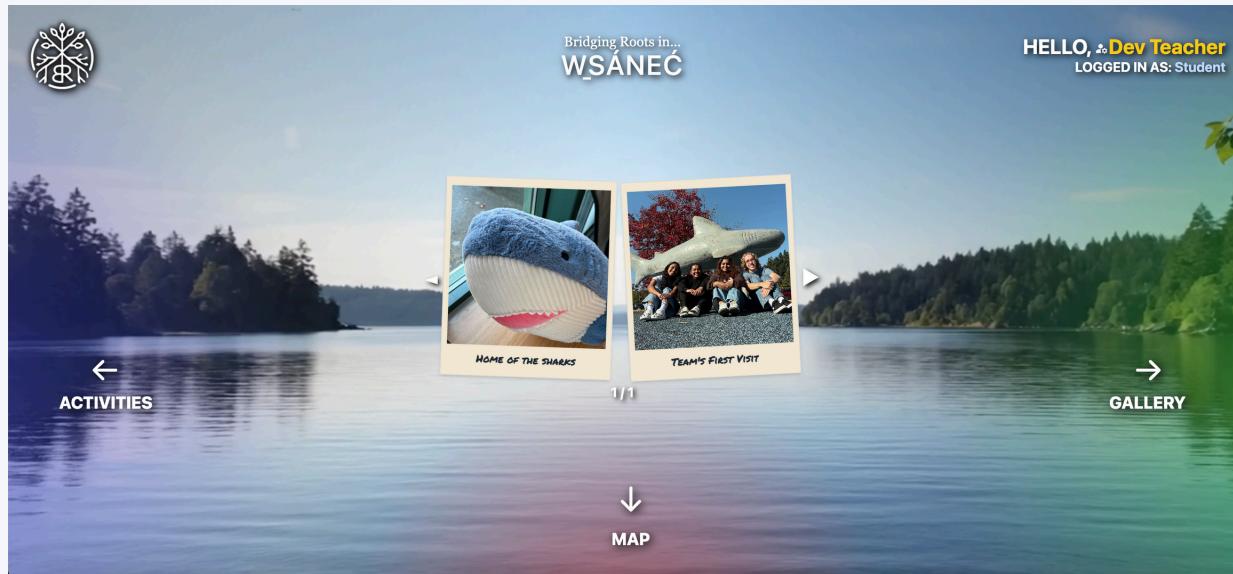
Mathiné

Mathiné is a student-built, research-informed Brightspace add-on that pulls all course deadlines into one place, helping students plan, break down, and schedule their work so they can stay on top of their studies without being overwhelmed.

Mathiné

Mathiné builds on last year's Neurovation project, which explored how digital tools can support neurodiverse learners with organisation and time management. Expanding this work campus-wide, the Mathiné team conducted interviews, surveys, classroom visits, and pilot studies to design a unified, research-informed planning tool built directly into Brightspace.

Mathiné allows students to see all deadlines, assignments, quizzes, and exams on one page. Its integrated to-do list helps learners break tasks into smaller steps and automatically find time in their schedules to complete them. This work was made possible through collaboration with UVic's Privacy Office, UVic Systems, and the Learning and Teaching Innovation Department.

Early pilots revealed challenges: confusing access paths, an overdesigned interface, and competition with existing calendar tools. In response, the team simplified the user experience, reduced steps to get started, added clear guidance, and streamlined the interface to improve accessibility and adoption.

Now entering its third year with Inspire, Mathiné continues to evolve as a student-built platform that helps learners stay organized, start tasks earlier, and build sustainable study habits.

"This project has shown us that designing for students means listening to students. Our most important improvements came from hearing where learners felt overwhelmed or lost—and rebuilding with their needs in mind."

— Mathiné Team

Meet The Team

AARJAN GHIMIRE

Aarjan is a Master student in Computer Science at UVic who worked on software development for half a decade in the area of community uplifting, student education and service business. His academic work leans towards the design thinking of computing education and collaborative software engineering. With a foundation in software development, Aarjan looks for design thinking in settings that explore the different constraints in design decisions.

ANNA BIRNS

Anna is a Computer Science and Psychology student with a passion for understanding human cognition and translating those insights into meaningful technological solutions. She is driven by a desire to build tools that align with how people think and behave, using insights from psychology to guide thoughtful, human-centered design. Grounded in a strong interdisciplinary perspective, Anna approaches challenges with genuine empathy for users. She seeks opportunities to create technologies that are innovative, impactful, and situated at the intersection of computing and the human mind.

BILLY YUEN MING

Ming is an Information Systems student at Singapore Management University, passionate about tackling digital transformation challenges at the day-to-day employee level. A self-driven learner, he actively seeks out industry mentors and opportunities to broaden his perspectives and skills..

CHRISTINA MCNEIVE

As a Computer Science student, Christina is passionate about building software that creates real-world impact. Her goal is to become a software developer creating solutions for real-world challenges - from organisational and accessibility tools to restoration databases with spatial imagery. Christina is passionate about intentional, sustainable progress, valuing the impact of steady effort. This approach shapes both her technical work and how she engages with projects, ensuring that what she builds reflects genuine purpose and lasting value.

Meet The Team

ISAAK WIEBE

Isaak is a dedicated Software Engineering student who views technology as a powerful vehicle for positive social change. Driven by a genuine passion for making software that helps people, he focuses on building intuitive solutions that address real-world needs. He believes that engineering is most effective when it bridges the gap between complex technical systems and human-centric design. Through his current development work, Isaak strives to demonstrate how thoughtful coding can empower users and create a meaningful impact.

JAKE CUSHWAY

Jake is a passionate Computer Science student committed to developing innovative tools that create meaningful impact. With a newfound inspiration for learning technologies, he is driven by a desire to design solutions that enhance student success throughout their academic journey. Through his work at Inspire, Jake hopes to build thoughtful, transformative tools that improve the student experience. Motivated by a love for learning new technologies, Jake continually seeks opportunities to solve real-life problems using innovative technology.

TAYLOR HALL

Taylor is a Computer Science student specializing in Software Systems who is committed to improving the way students learn and stay organized. Through collaboration with the INSPIRE program, Taylor focuses on creating tools that make it easier for students to study, manage their coursework, and maintain balance throughout the academic year. With a strong interest in building practical and user-friendly software, Taylor aims to design solutions that reduce stress, support academic success, and help students feel confident as they navigate their university experience.

Solution Overview
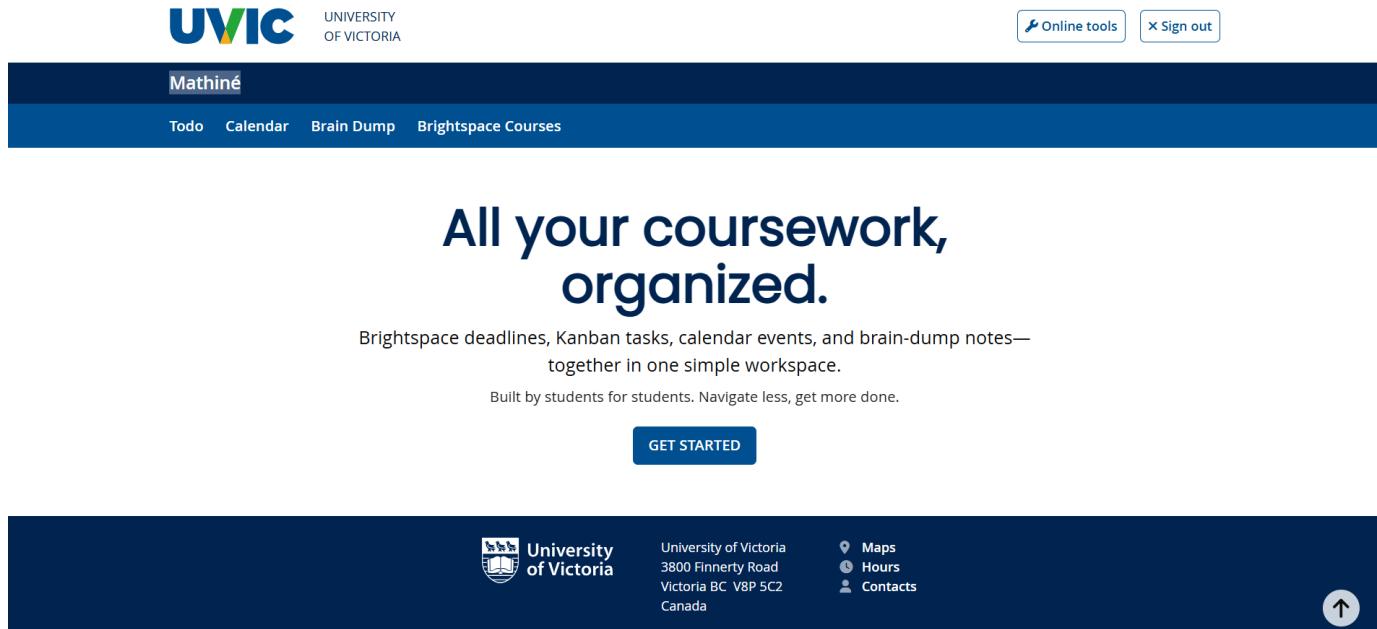
Online tools × Sign out

Mathiné

Todo   Calendar   Brain Dump   Brightspace Courses

All your coursework, organized.

Brightspace deadlines, Kanban tasks, calendar events, and brain-dump notes—
together in one simple workspace.

Built by students for students. Navigate less, get more done.

GET STARTED

University of Victoria
3800 Finnerty Road
Victoria BC V8P 5C2
Canada

Maps
Hours
Contacts

UNIVERSITY OF VICTORIA

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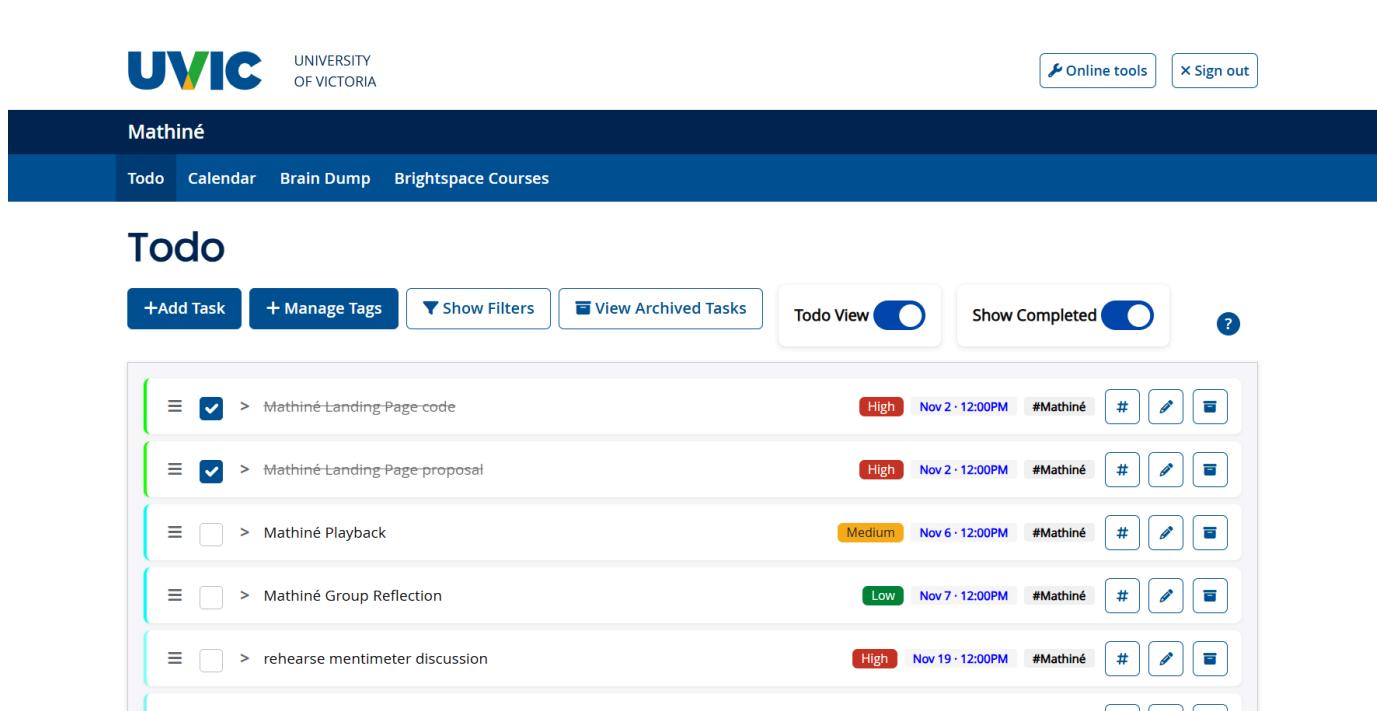
Todo

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ACTION HUB

Through their collaboration with the non-profit Meaningful, this team tackled one of the biggest challenges non-profits face: time lost to administrative tasks. Their project streamlines everyday workflows, allowing organisations to redirect that time towards work that truly makes an impact.

PROJECT 3

ACTION HUB

Action Hub was built with non-profits in mind. These organisations operate under constant pressure, moving between platforms for emails, meetings, notes, and stakeholder management. With limited staff and an overload of disconnected tools, they often spend valuable time searching for information rather than creating impact. And when that information is scattered, AI cannot offer meaningful support; it simply lacks the context to do so.

This team set out to change that. Their solution, Action Hub, is a unified software for non-profits' schedules, meetings, tasks and follow ups. It provides AI with this rich context, right down to the organisation's vision and mission, to dramatically improve the accuracy and usefulness of AI's responses.

Action Hub offers non-profits a cohesive set of tools: an AI Notetaker, automatic meeting summaries, suggested follow-up tasks, a smart meeting assistant, and personalised email generation. These tools ultimately help non-profits to maintain strong, personal relationships with their stakeholders, without the administrative strain that pulls them away from their mission.

"This project gave us the rare opportunity to build AI not just for efficiency, but for people doing meaningful work. We're grateful for the chance to create something with real social impact, and it reminded us that as developers, we're shaping systems that affect real communities. With that comes the responsibility to build safely, ethically, and with empathy, always keeping people at the centre of what we build."

– Action Hub Team

Meet the Team

NITIN GUPTA

Nitin is the mentor for the Action Hub team, and an enthusiastic champion of AI for social impact project. With prior industry experience, he merges technical expertise and empathy to address real-world challenges. Currently pursuing his master's degree, he focuses on ethical AI integration and responsible innovation. By collaborating with nonprofits, industry professionals, and researchers, he creates scalable solutions that support underserved communities.

TORI NG

As a computer science student, Tori views technology as a powerful tool that should be directed toward meaningful social impact. She approaches design and development with a strong sense of responsibility, emphasising empathy, clear communication, and thoughtful collaboration. She strives to build solutions that address real human needs and reflect her commitment to socially responsible, people-centred technology.

TRINITY WEST

Trinity is a dedicated Computer Science student fueled by a passion for AI technology and creative problem-solving. Driven and thoughtful, she values clear communication and empathy as essential parts of building meaningful solutions. With a strong desire to make an impact, Trinity aims to harness the power of innovative AI tech to address real-world challenges and create tools that genuinely uplift the people and communities around her.

RIYA SHRESTHA

Riya is a Computer Science student passionate about using technology to support communities and create meaningful change. Through her experience in the program, she learned the importance of co-design, teamwork, and building tools that respond to real needs. With a growing focus on computing education and social impact, Riya hopes to contribute to projects that combine technical skills with meaningful, ethical design.

Meet the Team

FAHEEM KAMEL

Faheem approaches every project with consistent effort and care, guided by close attention to detail and a commitment to thoughtful, user-centred design. Empathy informs both his work and his collaborations, shaping how he understands and responds to user needs. He grounds his development process in understanding users deeply, exploring ideas iteratively, and solving problems with intention. These principles help him create solutions that are practical, considerate, and genuinely supportive of the people who use them.

CEZAR HIRSESCU

Cezar Hirsescu is a fourth-year Computer Science student at the University of Waterloo and Business student at Wilfrid Laurier University. Originally from Toronto, he loves building modern, user-friendly software and is passionate about full-stack development and learning new technologies. Outside of tech, Cezar is a dedicated Triathlete, bringing the same drive and discipline to athletics that he brings to his work.

RANGA SASHANK G

Ranga is a 4th-year Computer Science student at UVic. He enjoys full-stack development and building the behind-the-scenes pipelines that make AI useful in real workflows, not just in theory. Curious by nature and practical in approach, Ranga cares deeply about making technology reliable, simple, and meaningful for the people who use it every day.

OUR SOLUTION
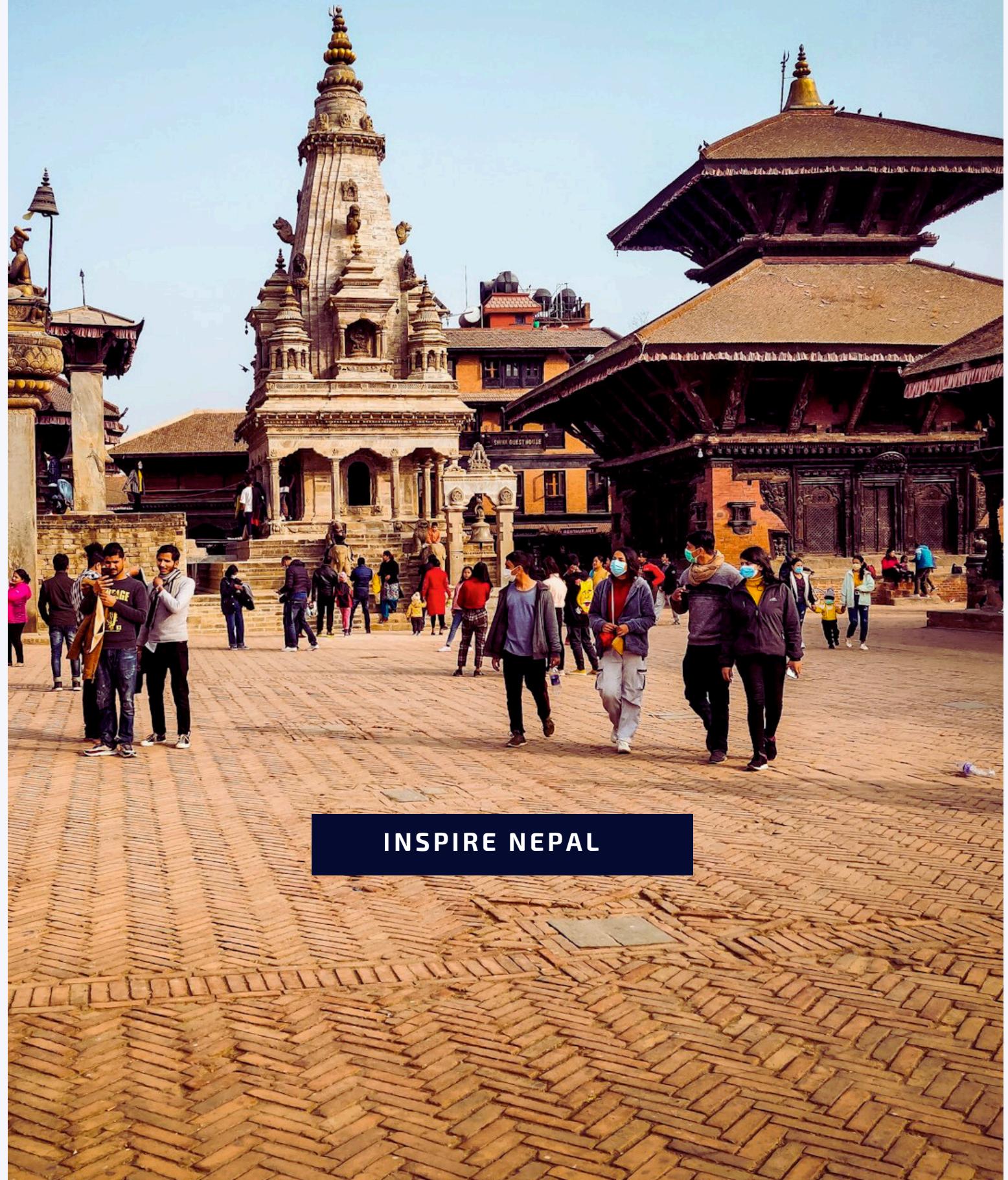
INSPIRE NEPAL

Genesis

Partnering with MCDS, Team Genesis developed a solution to digitize Self-Help Groups across Nepal. Born from immersive co-design sessions in remote districts, this software benchmarks group capacities against community medians. By visualizing distinct trends across various fields such as leadership and finance, the tool empowers data-driven decisions to ensure the journey toward transformed communities is effectively measured and sustainable.

Genesis

Despite Nepal's development progress, many rural communities still struggle to access financial support and sustainable livelihood opportunities. Our partner, Multipurpose Community Development Service (MCDS), supports these communities by organizing Self-Help Groups (SHGs), where women and local members work together to solve challenges before seeking outside assistance. As the number of SHGs grew, paper-based systems made it difficult for MCDS to track which groups were becoming independent and which needed support.

To address this, Team Genesis conducted co-design sessions, including travel to remote district to build a solution grounded in community needs. The resulting software digitizes SHG records and introduces comparative radar charts that benchmark each group against the community median. This allows MCDS to clearly see strengths in areas such as leadership and financial management, as well as identify gaps that require attention.

By transforming static paper files into dynamic progress data, the system enables MCDS to pinpoint vulnerable groups and members who need immediate assistance, while also generating insights for district- and national-level planning. The tool shifts MCDS from broad oversight to targeted, evidence-based action, helping ensure that resources reach the communities who need them most.

"Seeing a Self-Help Group in action grounded our design thinking process. Real impact happens when technology meets human reality."
 — Team Genesis

Meet The Team

ACHUT SUNAR

Achut is an Computer Science student, passionate about technology to make meaningful and impactful impacts. He has a strong enthusiasm for learning new things. He combines creativity with analytical thinking to solve problems. He aspires to make software and tools that makes a social impact.

ANUP UPRETI

Anup is a recent computer science graduate with the aims to make a change to the community with the vision of making life easier with technology. With every community facing a solvable challenge, the belief inspires him to continually grow and create solutions that can make a powerful impact.

BIPANA PARIYAR

Bipana Pariyar is a learner who is pursuing her bachelor's degree in Information technology. She loves transforming her imagination into reality through the power of technology. Whether she is experimenting with new tools, working on creative projects, or developing innovative solutions, she enjoys the process of turning abstract ideas into meaningful outcomes. With a blend of creativity, determination, and a commitment to growth, she strives to evolve both personally and professionally in the dynamic world of IT.


CHANDIKA WAGLE

Chandika is a computer science student with a deep passion for technology and a strong desire to use her technical skill for a greater purpose. She is dedicated to developing software that truly makes a difference in society. Her aim is to build a system that creates a lasting, positive impact on people's lives. She believes that every problem has a solution waiting to be discovered.

Our Solution

Inspire x Singapore

Inspire Reaches Singapore!

INSPIRE is thrilled to announce that in addition to our engaging students in Victoria, Canada, and Kathmandu, Nepal, in 2025 we are hosting **five SMU (Singapore Management University) students** on exchange to participate in INSPIRE. This collaboration with SMU is a critical step into expanding INSPIRE into a truly worldwide collaboration to creating the next generation of engineers that are motivated by social impact.

We extend a special thank you to **Dr. Chris Poskitt,** director of undergraduate teaching, at SMU for his passion and sharing our vision to expand INSPIRE into Singapore. He has helped us tremendously with coordinating the program logistics between UVIC and SMU!

SMU
SINGAPORE MANAGEMENT
UNIVERSITY

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, mentors, community partners, and supporters for helping me create something amazing at the University of Victoria, and beyond."

- Dana Damian, Program 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 and practitioner mentors for helping us with another successful year of Inspire. I'd like to thank all of our students too. Your enthusiasm, resilience, and positive attitudes towards solving challenging societal problems through engineering never fails to be truly inspirational."

- Kezia Devathasan, Program Manager