



Welcome Back!
Learn What's Brilliant
at the **Lab**
2022-2023 Teacher Programming

SUPPORTING INNOVATION IN EDUCATION FOR YOUTH AND EDUCATORS

[BRILLIANTLABS.CA/2022-2023](https://brilliantlabs.ca/2022-2023)



Welcome Back!

"Hello & Welcome Back! With the support of our federal and provincial partners, Brilliant Labs is looking forward to the 2022-2023 school year and providing more than 45 STEAM programs, 4 Innovation Challenges, the BL project idea portal, LMS, after-school and a variety of programs like Cyber Security, Natural Making, and Biomaking. Plus, updates to our b.Board, learning tools and the year's showcase event: The 2023 Atlantic Canadian School Maker Faire! Join us to explore what's Brilliant At The Lab in this 2022-2023 Teacher Programming Guide!"

- Jeff Willson, Executive Director, Brilliant Labs



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About Brilliant Labs

An Atlantic Canadian-based charity offering a hands-on, experiential learning platform, providing youth with opportunities to develop coding and digital skills. When creativity, innovation, and technology are applied to projects supporting the United Nations Sustainable Development Goals (SDGs), educators and youth can create change within their classrooms, their communities, and throughout Atlantic Canada, and beyond.

Reach & Impact

- **7,000+ Summer Opportunities**
Youth Reached Summer 2022
- **80,787+ Teachers**
In Class, Virtual, Professional Learning
- **772,937+ Youth**
Experiences, Workshops
- **6,670+ School and Partner Visits**
BL Project Specialists, Co-Op Student Mentors
- **6,644+ Special Events**
Guest Speakers, Coding and Digital Skills Workshops
- **310+ BL Labs Makerspaces**
Opening More School Makerspaces Monthly!
- **2013+ Carts & Kits Deployed**
Maker Carts, Maker Kits, Cyber Security, Innovation Challenge
- **4,537+ Projects**
Student-Led Brilliant Projects Funded

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Innovation Challenges

Join the challenge! This year Brilliant Labs will be offering 4 Innovation Challenges. Each challenge provides its own learning opportunities and aligns with the [United Nations Sustainable Development Goals \(SDGs\)](#). Students will be challenged to solve real-world problems, think creatively, and aspire to move out of their comfort zones while meeting learning outcomes.

At Brilliant Labs we want to reduce our environmental impact, we take pride in calculating our impact and hope to reduce our organization's carbon footprint. We encourage you and your students to look at what you can reuse to make your Innovation challenges project not only amazing but more eco-friendly.



Circular Making

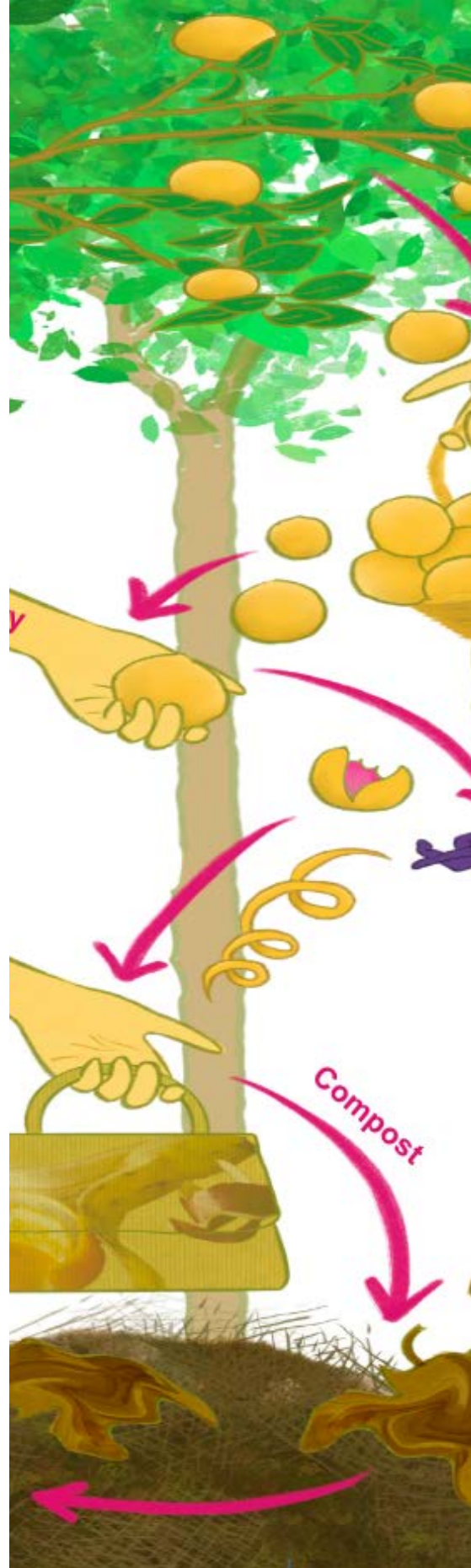
This fall we will explore the concept of circular design in the context of our economy and how we can create sustainable products/materials.

Students will learn what a circular economy is and consider the principles of recycling, reducing and especially reusing! Reusing is emphasized in circular design as a waste material can have many uses before being composted or discarded.

For example, some tires are made of a particular form of rubber which is challenging to re-cast into other tires; these can be made into various new products like shoes or mats. The same can also be done with food waste by generating food composites.

The Circular Making Innovation Challenge (Oct 3 – Dec 22, 2022) will give Teachers & Students hands-on learning tools, Brilliant Labs' Project Specialist support, synchronous/asynchronous about, how to & critical thinking workshops, an invitation to an exclusive Brilliant Labs guest speaker talk. Plus, a challenge showcase finale with teams advancing to the Atlantic School MakerFaire in May 2023.

[Register Now](#) [Learn More](#)



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Communities Of The Future

This fall Brilliant Labs is challenging youth to reflect on the role of sustainable and equitable communities. The Communities Of The Future Innovation Challenge will inspire your students to explore their empathy and ingenuity to realize how our environment can impact a community's wellness, economy and longevity.

Together, let's find innovative ways to solve real-world problems impacting our communities like transportation, energy, green space, clean drinking water, innovative building design and use of sustainable materials to reduce our environmental impact and carbon footprint. This Earth Day, April 22, 2023, we encourage students to explore what can be reused to make your Communities of the Future project not only amazing but more eco-friendly!

The Communities Of The Future Innovation Challenge ([September 19 – May 2023](#)) will give Teachers & Students hands-on learning tools, Brilliant Labs' Project Specialist support, synchronous/asynchronous about, how to & critical thinking workshops, an invitation to an exclusive Brilliant Labs guest speaker talk, student journal & glossary, teacher-tips & tricks, challenge showcase finale with teams advancing to the Atlantic School MakerFaire.

[Register today](#) to access learning resources, workshops and more!

Let's connect and get ready to dive into the [United Nations Sustainable Development Goals](#) #1; No Poverty, #2: Zero Hunger, #6: Clean Water & Sanitation, # 7: Affordable & Clean Energy, #8: Decent Work & Economic Growth, #11: Sustainable Cities/Communities to name a few. Together we can design and create innovative products that will sustain healthy communities, people, wildlife and our planet. [Questions?](#)

[Register Now](#) [Learn More](#)



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Innovative Fashion

Join us, January 10th, 2023, as we launch this creative design challenge! The Innovative Fashion Innovation Challenge will inspire youth to discover, create and innovate fashion.

Youth will create fashion projects by learning more about sustainable and responsive materials.

Where Science Meets Fashion!

Get ready to design actuated garments and accessories that change form, while combining craft and technology to create textiles with new behaviours. Discover e-textiles, biofabrication, hybrid-body craft and so much more. Your challenge will be to rethink the fashion industry: making it more creative, more ethical and more conscious... and way cool SCIENCE! [Let's connect and ask us how?!](#)

- Pneumatic Fashion: Make dynamic garments and accessories triggered by air pressure.
- Intro to electronic embroidery: Sew with conductive thread and electronic components to make textiles that can sense, compute and respond
- Bio-inspired Computational Fashion: Learn ways to replicate natural patterns with programming
- Dye with bacteria: Learn synthetic biology to create eco dyes
- 3-D embedded textiles: If you own a 3D printer, join us to explore ways to make aesthetically pleasing and functional garments that use 3D printing

Teacher & Student Resources

The Innovative Fashion Innovation Challenge (January 10th – April 14, 2023) will give Teachers & Students hands-on learning tools, Brilliant Labs' Project Specialist support, synchronous/asynchronous about, how-to & design thinking workshops with kits, an invitation to an exclusive Brilliant Labs guest speaker talk, a challenge showcase finale with teams advancing to the Atlantic School MakerFaire. [Register Now](#) [Learn More](#)



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Ocean Tech

The Ocean Tech Innovation Challenge will encourage students to consider how science, observation, and innovation can be used to engineer solutions to help protect our oceans and sustainably grow our Blue Economies. With "Canada's ocean economy accounts for \$31.7 billion annually in gross domestic product and almost 300,000 jobs in fisheries and aquaculture, energy, shipping, tourism and recreation. Canada is developing a comprehensive Blue Economy Strategy" ([Blue Economy, CND](#)) It is more important than ever to do so in sustainable & ecologically responsible ways.

Science & Exploration

Students can choose their project exploration! Here are a few ideas:

- Biomaking Engineer: tackle industry waste to encourage a circular economy model in your community.
- Build energy-efficient boats that leave a small or non-existent carbon footprint.
- Natural Maker: learn more about our ecosystem and protect our shorelines.
- Social Entrepreneur: create a movement or Call-To-Action to educate citizens on the environmental impact found in your coastal community.
- Robotician: design and create robots to help clean our oceans or even explore the minerals in deep sea waters.
- Blue Energy: design technology that can harness ocean energy sustainably/safely/ethically.
- Find solutions for international food supplies.
- Develop data collecting devices to learn more about our oceans.

Teacher & Student Resources

The Ocean Tech Innovation Challenge start date will be announced this fall. Once you register will you and your students will receive hands-on learning tools, Brilliant Labs' Project Specialist support, synchronous/asynchronous about, how-to & design thinking workshops, an invitation to an exclusive Brilliant Labs guest speaker talk, a challenge showcase finale with teams advancing to the Atlantic School MakerFaire. [Register Now](#) [Learn More](#)



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School Maker Faires!

This is the year of Brilliance:) The Greatest Show and Tell on Earth is coming in May 2023. It's the Atlantic Canadian School Maker Faire! A community has been selected but you'll have to stay tuned to learn more as we finalize details! [Subscribe to MakerNews](#) for monthly information and updates.

This event will showcase projects from the 4 Atlantic Provinces. You and your students will have a chance to meet makers from the community, industry, and other schools. Check out some of last year's projects and "[Story Of Making: Virtual Maker Faire 2022](#)".

Let's share your student's story. This year create something new, inspire innovation, and [register for an Innovation Challenge](#) and [explore the BL Project Portal for ideas!](#)

Host A School Maker Event

You and your students are invited to host your own event at your school. [Contact us to receive a How-To Maker Event Guide \(subject field Maker Event\)](#). Our team will promote it on our social media channels & promote 'Brilliant WOW' Projects!, provide marketing collateral & swag for your hosts, and provide materials for a (1) maker hands-on station (Example: soldering/robotics/b.Board. Quantities limited).

Learn More: Watch & Read

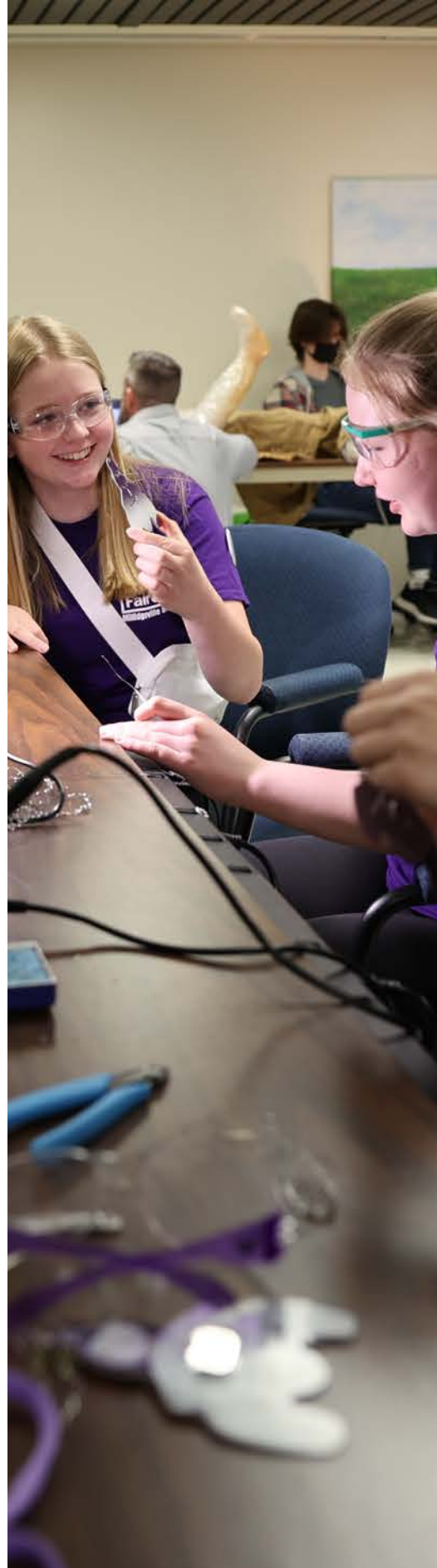
We have lots of resources for you! Check out our YouTube Channel or Learn more about School Maker Faires in the most recent [BL Magazine: Calling All Makers](#)

YouTube

[LIVE Atlantic School Maker Faire 2022](#)

[Nova Scotia School Maker Faire](#)

[Newfoundland & Labrador School Maker Faire](#)



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For Your Class

We're here to help you. Brilliant Labs offers professional learning for teachers, workshops for students, funding, materials, and support. Let's have a look at what is available to you.

Project Funding

Looking for project materials, training, or support? Brilliant Labs offers funding for hands-on innovative classroom projects. [Visit the Funding Portal Here](#)

Please [Subscribe To MakerNews For Announcements and Updates!](#)

Ideas? BL Project Portal Can Help!

Brilliant Projects aim to support teachers and organizations working with children by providing help with cross-curricular learning tied to STEAM curricular outcomes and UN SDGs. These projects aim to promote the use of technology, coding, creativity, innovation, and entrepreneurship in learning for K-12 students. Explore hundreds of projects and get ideas for your classroom! [We're here to help too.](#) [Visit the BL Project Portal](#)

Brilliant Labs Makerspaces

We can provide funding and guidance to help you develop a class or school Lab or Makerspace. With over 300 school-based Labs currently supported we are happy to share our experiences and best practices. You can access our [How to Get Started Lab guide](#) here. Plus learn how [St.Stephen High School combined "Wellness & Innovation"!](#) Explore a ["Makerspace Through The Eyes Of A Student"](#)

Classroom Workshops

We are available to support your classroom, in person and virtually. [Contact us](#) and we connect you with a Program Specialist to provide the necessary materials for workshops. Workshop subjects include: coding & digital skills, biomaking, b.Board and more. You can also access [pre-recorded learning sessions](#) for all grade levels.



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Community TV

We have 2 community TV shows. MakerFUN: light technology and STEAM learning that can be done with materials from around the home and b.Brilliant project & technology introduction genre. Both offer unique opportunities for youth learning in class or at home. These shows are supported by students through co-ops, video/editing projects and offer opportunities for youth who want to explore creative writing, research and digital production.

MakerFUN

To support at-home learning during the lockdown, Brilliant Labs created MakerFUN. Having discovered that 40% of youth have little to no internet access, BL reached out to Rogers & Eastlink to create a community TV show to help support At-Home learning activities from household items that could be found in junk draws, closets, basements or backyards.

In season 2: MakerFUN Math, Ian Curran joined the fun as our host who explored science and math with guests.

Notably, we met Ian and the [St. Stephen Spartan TV](#) crew during the filming of b.Brilliant. The crew with the support of teacher [Scott Legge](#) travelled to film, capture audio and edit segments for both shows! [Read More](#) [Watch It](#)

b.Brilliant

[b.Brilliant](#), has a little higher tech and is energized by youth, on and off the screen thanks to co-op student placements and our friends at [Spartan TV!](#)

Host, Alex Hawkins, Rothesay High School Student, and her fellow Makers explore the world by creating with new technology, interviews with experts to help solve problems and work to uncover the mysteries of BB: a mischievous lab A.I. that seemingly likes to help, but also likes to cause some problems for b.Brilliant's teacher: Mr.Lingley. Plus, after watching the show follow the [b.Brilliant Maker Guides](#) to create the projects at home or in-class. If you're a [Bell Fibe TV1](#) customer stream b.Brilliant or on [BL YouTube](#)



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Making A Difference Speaker Series

Brilliant Labs is committed to empowering youth, educators, and families to fuel their passions, take creative risks and construct a sustainable future for themselves and their communities. We explore fun ways to introduce novel technologies to catalyze positive social and ecological change within communities.

Our [Making A Difference Speaker Series](#) features global speakers from diverse backgrounds to spark conversations on technological innovation, humanity-centred design, ethics, creativity, and leadership. The 30-45 min talks deliver experiences that amplify youth voices about issues they care about and invite them to participate in our exciting innovation challenges. Join us to awaken your creativity, learn from experts with meaningful conversations, and ask questions. This year we look forward to exploring new topics, including fashion tech, ocean tech, musical machines, artificial intelligence, synthetic biology and more.

Students, teachers and the public are encouraged to join independently or in groups.

Interested? [Email Alisha Collins](#), to find out more!

[Brilliant Labs Magazine: Future Forward "Brilliant Labs Speaker Series With Tosca Terán"](#) is an interdisciplinary artist creating immersive sensory experiences with music and biomaterials using fungi. Tosca shares with teachers and students her work in bioscience to create more renewable and sustainable materials.

[Watch Tosca's Talk on BL YouTube](#)

Find all our 2021-2022 Making A Difference Speakers at [BrilliantLabs.ca/speakerseries](https://brilliantlabs.ca/speakerseries)



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Cyber Security

Build a smart community and start thinking about Cyber Security while learning to stay cybersafe and mitigate vulnerabilities.

Brilliant Labs offers in-class and virtual support and resources for educators to help students understand the importance of online safety and privacy, and the importance of being cyber secure at home, at school, and in the community.

From our Cyber Security classroom kits to scripting tutorials our comprehensive Cyber Security Framework includes activities and resources to help students learn about Cyber Security principles like Ethics, Prevention, Detection, Networking, Scripting, Career Paths, Home Automation Risks, CyberSec Basics, and more. Email info@brilliantlabs.ca to find out how to bring cyber security to your students.

Cyber Security Classroom Kits

Brilliant Labs has developed a Cyber Security classroom kit which includes the materials and resources for up to 32 students to get hands-on while learning cyber security concepts and digital skills. Students will work to develop a Cyber Safe smart community and have an opportunity to learn about how to mitigate community vulnerabilities, networks, scripting, and IoT (Internet of Things).

With only 45 classroom kits available quantities are limited. Please email info@brilliantlabs.ca to request a classroom kit.

- [Online Safety](#)
- [Learn More: Cyber Security, Making A Difference](#)
- [Brilliant Labs Magazine: Cyber Security](#)



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BioMaking

Bio design is a new field that uses biological materials and systems to make sustainable products for human purposes. Around the world, people are exploring ways of bringing biotechnologies outside of research labs and into schools and community spaces. Artists, designers, engineers and hobbyists are harnessing the power of biological living-materials to solve critical problems, create sustainable design products and make art a reality.

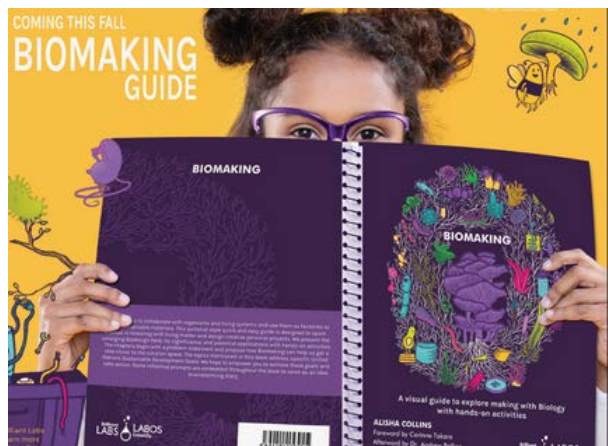
Brilliant Labs Biomaking initiative helps young people explore complex biological systems in nature to solve critical problems. Biomaking is a new concept for our Labs where young people can collaborate with harmless microbes like fungi, bacteria, yeast, and algae to design meaningful projects for a sustainable future. After successful pilot workshops with Atlantic schools last year, we will continue our exploration, including advanced synthetic biology activities. This year we will focus on the theme of senses with Biocollaboration activities where we work with living organisms to [design innovative biomaterials](#). Microbes and living things are active partners to humans but require thoughtful engagement.

Visit [Brilliantlabs.ca/Biomaking](https://brilliantlabs.ca/Biomaking) to learn more!

Biomaking Guide For Teachers & Students

We are excited to announce our first ever official publication from the Brilliant Labs Press! Our soon to be released book Biomaking: A visual guide to exploring making with biology.

Author, [Alisha Colins](#), presents the emerging Biodesign field, its significance, and potential applications with hands-on activities. The chapters begin with a problem statement and propose how Biomaking can help us get a step closer to the solution space. The topics mentioned in this book address specific [United Nations Sustainable Development Goals](#). We hope to empower youth to take action and achieve these goals. [Sign up to be notified when the Biomaking Guide is available!](#)



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Natural Making

Teachers, students and families can find tools, materials and resources in their own backyard. Nature provides most of everything you will need for your Natural Maker project. We're here to help you with a few ideas, tips, technology and educational resources to help create an immersive and natural learning environment.

To be learn more about Natural Making [contact us](#) or visit BrilliantLabs.ca/NaturalMakerspace

We have lots of resources for you! Check out the BL YouTube channel for these and more Natural Making ideas:

- [What is the philosophy behind the Natural Maker pedagogy?](#)
- [Place-Based Imaginative and Ecological Education | Conversations With Clayton Maitland](#)
- [Outdoor Workshop](#)

Brilliant Labs Magazine has been capturing Natural Making projects, professional learning opportunities and summer camps stories for the past several years. Here are a few:

- [Natural Potential: Exploring Maple Ridge Outdoor School BC \(FR/EN\) Written by Michelle Thibault & Kathleen Rice](#)
- [Empathy At The Water's Edge: NS Summer Camp Exploration](#)
- [Natural Makerspace Summer Camp \(FR/EN\)_\(Edmundston NB\)](#)
- [Creative Learning In Nature: Professional Learning \(FR/EN\)](#)
- [Becoming A Natural Making In 5 Steps \(FR/EN\)](#)
- [Education In Nature: Emotional Connection & Wellbeing \(FR/EN\)](#)
- [Sowing Seeds Of Happiness \(FR/EN\)](#)

Looking for more Natural Making ideas for projects? Visit our [BL Project's Portal and search: Nature](#)



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High School Virtual Co-op

Brilliant Labs offers over 12 different virtual co-op internship positions with room for more than 70 high school students. From 3D Printer Technician, Graphic Design, Digital Marketing, Magazine/Blog/SEO Writers, Hardware Engineering, Cyber Security, Web Development, App Development, Multimedia production, and Game Design.

[Brilliant Labs Magazine: Working Together](#) was created with the help of six co-op students and several students exploring media-based projects.

Here are a few samples of these co-op students' work!

- [The Curve: Learning & Thriving In Co-op, by Nghi La Simonds](#)
[High School BL Graphic Design](#)
- [Co-op Q&A : A Discussion with EECD, New Brunswick](#)
- [Artists 2030, Illustrations by Nova Scotia Graphic Art Co-op](#)
[Students: Nikol Strachov \(Cole Harbour, NS\) & Jayce MacGillivray](#)
- [Illustrator Carson Gavel, Kings County, NS Graphic Co-op](#)
[Student, Created this advertisement sample and is continuing on \(2022-2023\) to design and build the "New BB" for Brilliant Labs' Community TV Show: b.Brilliant.](#) Watch his progress in upcoming BL Magazine issues!
- Join Graphic Art, Designer and Writer, Emma Steeves as she designed [Paper Quilling With Math Outcomes & Wrote/Designed, MakerFaire Through The Eyes Of A Student](#)
- [Mitchell Murphy, Graphic Design Co-op \(Halifax, NS\), re-branded TAKE 5.](#)

If you know a high school student with an interest in digital skills please reach out to info@brilliantlabs.ca (Subject: Co-op)

Multi-Media Support

Do you have multimedia equipment or an interest in developing multi-media content at your school? From developing videos, podcasts or animations, if you are looking for authentic multimedia projects for your students, reach out to us: info@brilliantlabs.ca (Subject: MultiMedia Project)



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Professional Learning

This year BL will be offering a variety of Professional Learning in-person, virtually, cohorts, and a hybrid model. Plus, there will also be opportunities to join with a group of students.

Topics Include:

- Problem-Based Teaching And Classroom Management
- Natural Maker Workshop
- Natural Maker Naturel Cohort PI And Networking | Ateliers Virtuels Mensuels Maker Naturel
- Making For Circular Economy
- Explore Tech And Maker Materials
- Biomaking And Food Composites
- Morphing Matter
- Mission:Mars
- Cybersecurity
- First Lego League (FLL)
- Natural Maker Workshop
- Robotics With The Bboard
- Ocean Tech
- Clair2023
- Colloque Natural Maker Naturel Symposium
- Learn East 2023

[Join our Professional Learning Request List](#) to access the 2022-2023 BL Professional Learning calendar. Register Now!

Looking for regular updates on all BL events and programming? Subscribe to our ["First Look For Teachers / Enseignants"](#) mailing list found on our Contact Us & Subscribe website page to give you first access to our monthly MakerNews letter, BL Magazine, and funding announcements, project ideas and more!



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Learn At Your Own Pace

This year we're bringing back our Asynchronous Professional Learning! This will allow you to learn at your own pace and time.

Join us to develop your own classroom project with code-based and digital skills creation/development for your classroom. Our first asynchronous cohort is for teachers who want to develop their own projects based on their interests in their class.

Teachers will receive a making kit containing diverse materials. This will be an inspirational workshop to explore a multisensory variety of materials and explore:

- Electronics And Circuits
- Computational Skills And Concepts. During The Course
- Classroom Project Possibilities
- Co-Construct With Brilliant Labs Specialists And Creative Teachers
- Delve Into Relevant And Meaningful Practices To Design A Purposeful Learning Environment
- Build Confidence In Teaching And Understanding New Technologies To Enhance The Student Learning

[Join our Professional Learning Request List](#) to access the 2022-2023 Asynchronous Professional Learning events/details. Register Now!

Looking for regular updates on all BL events and programming? Subscribe to our ["First Look For Teachers / Enseignants"](#) mailing list found on our Contact Us & Subscribe website page to give you first access to our monthly MakerNews letter, BL Magazine, and funding announcements, project ideas and more!



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Prepping For Brilliance

We understand how precious preparation time can be for teachers. Our new professional learning initiative for educators, Prepping for Brilliance, helps provide you with a easy and accessible PL. We will come to you, in-person or virtually, set up all materials, and spend your prep time with you and any fellow colleagues at your school who are interested in preparing for brilliance. We really want to spend this time discussing a topic in the context of what makes sense for you, your team, your students and your school.

Examples of Prepping for Brilliance Topics:

- Getting Started With Making In My Class
- Discussing The Culture Of Making Across Our School And The Influence In Our Community
- Learning Outcomes And Assessment For My Students While They Are Making
- The Role Of Coding Outside A Technology Classroom.
- Making For My Grade Level
- Starting A Makerspace
- Starting A Brilliant Labs Project Or Innovation Challenge.
- The Role Of Empathy And Design Thinking
- Fostering Moments Of Brilliance In Our Students, Our Teachers And Community
- Integrating And Using The (Insert Material Here) Into My Class.
- How To Integrate UN SDGs In Your Class

[Join our Professional Learning Request List](#) to access the 2022-2023 Prepping For Brilliance Professional Learning events/details. Register Now!

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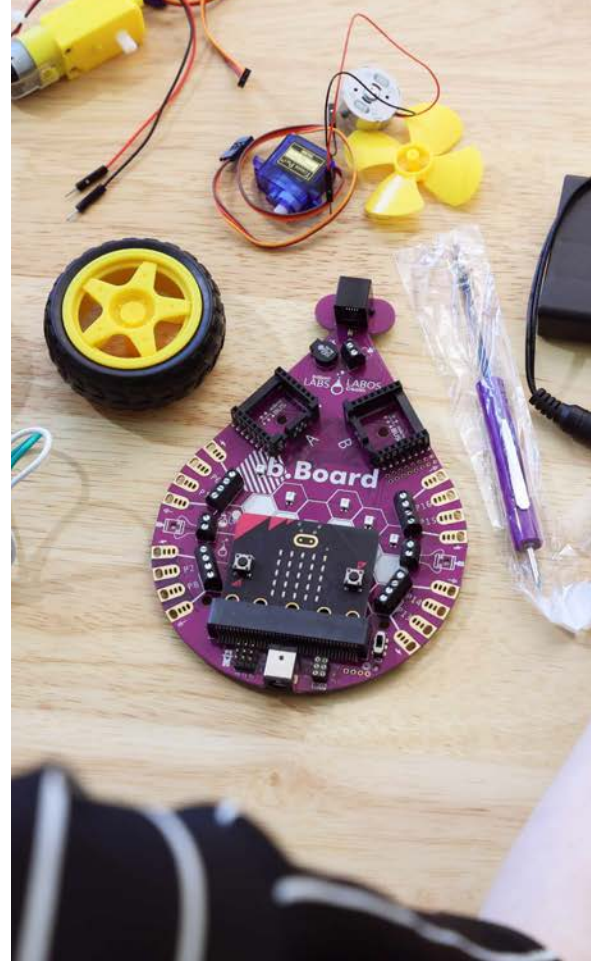
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b.Board PL and Research

Do you want to be part of the movement? If you are interested in learning more about our b.Board and see how it can influence your class projects, you are invited to take part in our research project. During this school year, we will offer b.Board specific training in person in each province from there we will keep working together to gather important information and publish our findings.

[Join our Professional Learning Request List](#) to access more b.Board learning events/details and become a part of teacher/classroom research projects. Register Now!

Looking for regular updates on all BL events and programming? Subscribe to our ["First Look For Teachers / Enseignants"](#) mailing list found on our Contact Us & Subscribe website page to give you first access to our monthly MakerNews letter, BL Magazine, and funding announcements, project ideas and more!



Student Learning Opportunities

Let's explore the upcoming student learning opportunities that include specialty programs, after-school, March Break & Summer STEAM camps, Walk In Colours, and entrepreneurial youth workshops.

Machine Learning / Artificial Intelligence

Did you know Brilliant Labs has developed a Scratch based Machine Learning platform? Visit scratch.brilliantlabs.ca where students can explore machine learning and artificial intelligence through easy-to-learn coding blocks. Email info@brilliantlabs.ca for more information, workshops, or training.



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After-School Programs

Learning is fun, especially when you're taking your ideas from concept to prototype! The Brilliant Labs After-School Programs offer youth, grades 3-8, the opportunity to code, design and explore tools that can help transform our world.

Whether you are interested in a weekly after-school program, a march break camp or even hosting summer camps in your school or area. Let's connect! Reach out to info@brilliantlabs.ca (Subject: After-School).

Summer STEAM Camps

This past summer Brilliant Labs reached more than 7,000 youth. We are always looking to reach more communities. If your school is interested in hosting a summer program, please reach out to us at info@brilliantlabs.ca (Subject: Summer STEAM Camp)

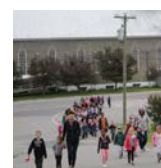
Walk In Colours

Walk In Colours (Marche en couleurs) is an annual community held in Edmundston, NB, every June. This is a fun way to connect and learn more about carbon footprints.

On June 10th, join Brilliant Labs and "I move...I learn" teams will participate in this colourful Health and Wellness Walk!

Walk In Colours' goal is to promote health and wellness for people of all ages! How far can we travel when we add up everyone's kilometres? Can we travel across the Atlantic provinces, from Edmundston N.B all the way to St.John's Newfoundland (1,992.6 km)? Or even, travel from St.John's Newfoundland to Vancouver, British Columbia (7087.6 km)? Who knows? We can dream big! Let's plant seeds of happiness on our way!

[Join Emma, BL Co-op student, as she shares how to make a seed ball.](#) This is a fun activity that you can talk on your Walk In Colours event. [Register your class for June 2023!](#)



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Entrepreneurial Support

Do you know a student who is starting a new business venture? Brilliant Labs has Program Specialists, Youth Mentors and Professional Leaders who can work with students to support prototyping, workshops, and design process guides that will entrepreneurs along the way. Plus, our team will support student entrepreneurs from research and prototyping, to patent and market launch!

Need support, tools, technology, funding, or guidance? We're here to help. [Read about Happy Cones! A sustainable and cool journey.](#)

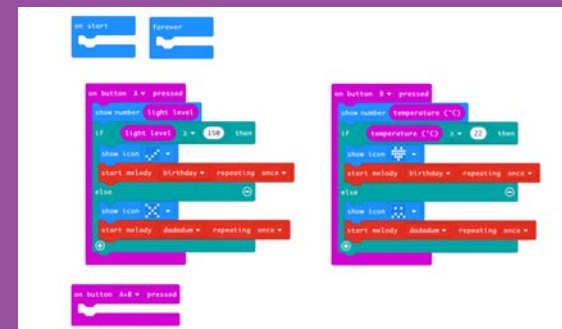
[Contact us at info@brilliantlabs.ca](mailto:info@brilliantlabs.ca) (Subject: Entrepreneur).

Hour Of Code

This past summer Brilliant Labs reached more than 7,000 youth. We are always looking to reach more communities. If your school is interested in hosting a summer program, please reach out to us at info@brilliantlabs.ca (Subject: Hour Of Code)

Learning Management System (LMS)

Did you know we offer free massive open online courses through our LMS? With 14 courses ready for you to learn at your own pace, like BioMaking and Machine Learning and more on the way, your students will love to explore, learn, and earn micro-accreditations. Check out our LMS courses at learn.brilliantlabs.ca



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Hack-O-Ween

This October 24-31st, we hope you will share your Hack-O-Ween projects with us on Brilliant Labs [Facebook](#), [Twitter](#) or [Instagram](#). #BLHackoween

- Learning Outcomes
- Environmental Considerations
- Hack-a-Toy
- Remote Light Up Pumpkin

- How to take a toy apart
- Intro to Makey-Makey
- Interactive Tombstones



BRILLIANTLABS.CA/2022-2023

Brilliant Holiday

Looking for a fun holiday project for your class? Let's explore different ideas, craft supplies, and technology to represent your own take on the holiday season. Handmade gifts, clothing, and decorations add that extra special touch to a season that is already filled with fun festivities.

[Watch Brilliant Holiday Student Project Playlist and be inspired!](#)

This December 19-23rd, we hope you will share your Brilliant Holiday projects with us on [Brilliant Labs Facebook](#), [Twitter](#) or [Instagram](#).

#BLBrilliantHoliday

Whether you already have an idea or want a little inspiration, check these links out:

- [Upcycle your fashion/Zero waste](#)
- [Make a light-up name tag](#)
- [Make a snow structure- Quinzhee style](#)
- [DIY light-up holiday wearables](#)
- [LED Cards \(Paper Circuits\)](#)
- [Scrolling along with micro: bit!](#)
- [Holiday Extravaganza](#)

Watch these How-To videos:

- [Brilliant Holiday Challenge: Fast Fashion](#)
- [Winter TinkerCad](#)
- [The Red Dress](#)
- [Brilliant Toque: Light It Up](#)
- [Hack A Hoodie](#)

Project Portal

[For more Brilliant Projects](#) with cross-curricular learning tied to STEAM curricular outcomes and UN SDGs visit the BL Project Portal for hundreds of project ideas for your classroom! [Visit the BL Project Portal](#) Don't forget [we're here to help too.](#)



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Mission Mars

There is a lot to be said about sending a space shuttle past the stratosphere on a monthly basis and its ecological impact. How can our students help innovate solutions to explore the universe in a more sustainable way? Mission: Mars projects explore various missions.

Here students will build and code a Mars rover using a variety of materials and sensors to complete a multitude of tasks.

Learn more!

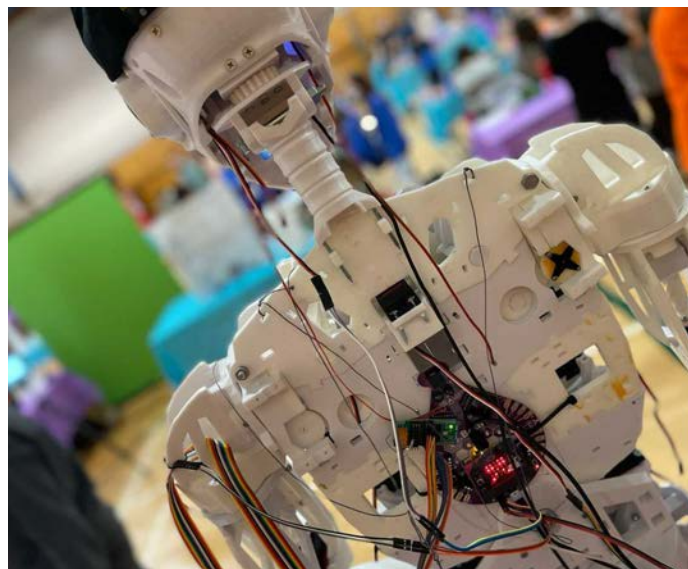
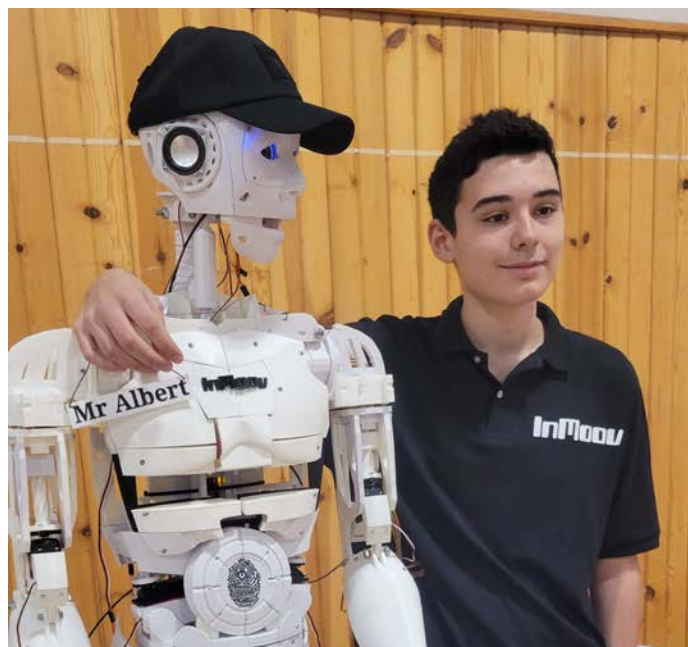
- [Discover Mission: Mars and its resources!](#)
- [Full Mission: Mars Playlist](#)
- [Watch How This Student Designed, Coded and Built Her Rover](#)

Robotz Got Brilliance

Are you ready to design and engineer a robot? What will your robot do? Why are robotics so important and how can they help make someone's day better? In this challenge we ask students to build a robot from scratch using different materials, to solve problems they see in their communities. Let's explore robotics through empathy. [Find resources on the Robotz Got Brilliance webpage.](#)

Learn about the robots created and showcased at the Brilliant Labs School Maker Faires, 2022:

[Mr. Albert, A 6' 6" 3D Printed InMoov Robot created by Oromocto High School Student, Jacob Ledoux, It is the first of its kind powered by the b.Board](#)



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First LEGO League (FLL)

The First LEGO League's three divisions inspire youth to experiment and grow their critical thinking, coding, and design skills through hands-on STEM learning and robotics.

Whether you are brand new to robotics, or an avid LEGO league participant, this well-structured challenge is for you and your students. Participate in a friendly competition where your students will collaborate, discover and where learn while having fun.

[Learn how New Brunswick teams moved onto the Maritime competition in Wolfville, NS.](#)

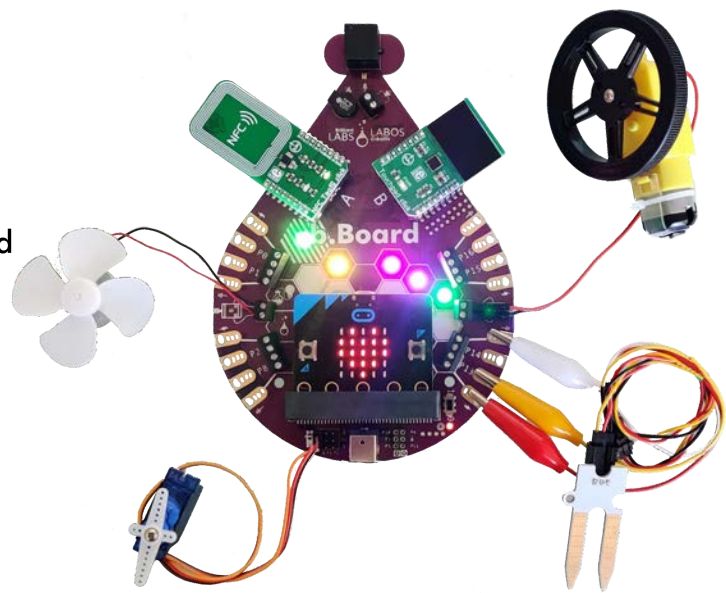
[Join the excitement as students travelled to Acadia University in Wolfville, NS, for the First LEGO League Maritimes Challenge](#)

Contact us at info@brilliantlabs.ca for instructions and registrations.



Rapid Prototyping

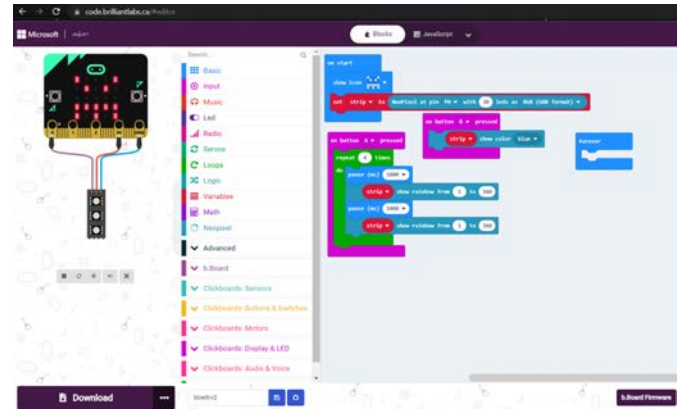
[The b.Board](#) is an open-source electronics hardware prototyping platform designed by Brilliant Labs. It's designed to be accessible to youth, creators, researchers, and inventors of all ages, use the b.Board to easily bring your IoT, Open or Big Data projects, robotics or other hardware classroom project ideas from concept to prototype in minutes. The b.Board opens up a new world of design possibilities with its integrated breakout pins, motor drivers, servo pins, onboard WiFi, high current supply capability, clickboard™ compatibility, expansion port and much more! [Learn more visit the Brilliantlabs.ca/bboard](https://brilliantlabs.ca/bboard)



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Coding the b.Board

Easily code the b.Board with a custom environment designed to help you effortlessly create your projects using blocks, JavaScript, or Python at code.brilliantlabs.ca. Our platform also includes ready to use project examples and tutorials helping your transform your ideas into inventions and making the b.Board the perfect rapid prototyping solution for makers and students of all ages and abilities.



Collecting Data with b.Board

The Brilliant Labs Cloud empowers makers and students to collect data and control their b.Board powered IoT (Internet of Things) devices. Students and makers can leverage HTTPS, MQTT, and WebSockets to develop real-time IoT devices and collect a variety of sensor data for Big or Open Data projects. To explore visit cloud.brilliantlabs.ca.

On June 20, 2022, Mr.Ashley Hallihan, Blackville High School teacher and students found the weather window they had been waiting for since 2019. Poor wind conditions kept their High Altitude Balloon project grounded, then lockdown. Three years later, during the last week of school the team make it happen.



"One word to sum up today... amazing! Great team effort with Brilliant Labs / Labos créatifs & ASDN ICE Centre team members. From the launch to the recovery, we were able to capture amazing video from a GoPro, 360Fly and drones. As well, we recorded data like temperatures, pressures, sound levels, acceleration and GPS coordinates. To find this payload in the middle of the woods with a drone is beyond amazing! [Video footage both 1080 and 360 panoramic](#) to come... here is a tease with some screenshots - enjoy!"
- Ashley Hallihan, Facebook, [BHS ICE Centre](#)



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Monthly Coding Challenges

Each month, on our [Monthly Coding webpage](#) we offer 4 coding challenges for beginner coders to advanced. These bilingual challenges use a variety of tools from paper and pencils, scratch coding, micro:bits, and syntax based coding like JavaScript and python. Use them as a whole class activity connected to your curriculum instruction, or as optional activities for students to extend their learning in new ways.



For More Brilliant Information

MakerNews

Each month we highlight a teacher and a project from each province. Subscribe for news and updates, or to nominate a Teacher or a Project. [Read MakerNews!](#)

BL Magazine

Each season we offer a more in-depth look at the innovations within our communities and around us. Success stories of our students, interesting innovation ideas, and project ideas you could use in your classroom. Nominate a Teacher for TAKE Five, a regular article, to highlight a champion teacher. [Read BL Magazine here!](#)

Subscribe to our mailing lists via the [contact us page](#) brilliantlabs.ca/contactus

Upcoming Events

MAKING A DIFFERENCE
Speaker Series 2021-2022
Designing inclusive and diverse soft wearable technologies
Dr. Cindy Hain-Liu Kao, Assistant Professor in Human Centered Design
Thursday, June 2, 10:00 am
We are pleased to announce our next speaker series session with Cindy Hain-Liu Kao. We are looking forward to welcoming Dr. Kao to share her unique work designing on-skin interfaces (i.e. smart tattoos and bandages), electronic textiles in Human-Computer interaction and wearable projects that blend art, science, and engineering boundaries.
[Learn More & Register Here.](#)

Walk In Colours!
Join Brilliant Labs and the "I Move, I Learn" movement on June 10, 2022 for the annual Walk in Colours event!
This year, participating classes will be able to help their native ecosystems by planting seeds of their province's official flowers.
[Learn More & Register Here.](#)

WALK IN COLOURS 2
TAKE POSITIVE ACTION TODAY TO HELP BOOST CLIMATE CHANGE
[Learn More & Register Here.](#)

THANK YOU FROM BRILLIANT LABS
This year's provincial School Maker Faire event was held virtually on May 12th & 13th. We would like to thank everyone who participated in this year's Maker Faire! Teachers, students & staff who came together to showcase all the Brilliant work created by our students this year. We look forward to seeing you at next year's Maker Faire Event!

BRILLIANT LABS SUMMER CAMPS
Stay tuned for more information on our summer camps and how you can participate! Details will be available throughout the month of June. Be first in line to register by subscribing to our email list here!

BRILLIANT LABS IS HIRING
Are you ready to be a Summer STEAM Mentor? You're caring, creative, energetic, relationship-focused, responsible, tech-savvy leader who is passionate about children, education and community development. Learn more about this 8-10 week position here.

STAY TUNED FOR NEXT YEAR'S PROGRAMMING GUIDE
Next year's programming guide will be available early in the next school year! Find out what Brilliant Labs will be offering in August!

INSPIRATION MAKER:
Do you know a teacher who inspires students by trying new teaching methods, projects, technology or other hands-on learning activities? If so, email info@brilliantlabs.ca. SUBJECT: Inspiration Maker, to be recognized in our monthly newsletter & social media channels. Remember to tell us why & include a photo!

REVUE LABOS Créatifs

Brilliant LABS MAGAZINE

Mr Albert

5 MINUTES AVEC PATRICK GIROUX

ECMA | JUNOS SPARTAN TV: THE RED CARPET

SCHOOL MAKER FAIRES

Hundreds of students celebrate innovation, in-person & virtually.

LABOS Créatifs

WELCOME! HERNAN LOPEZ

IAN FOGARTY'S LEARNING THROUGH PROBLEM SOLVING

TAKE 5: Shawn Doherty

Meet Alex & Mr. Lindley's BRILLIANT TV! Show

DOWNES

WELCOME! Pierre-Paul Cyr

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Follow, Like, Subscribe and Share Your Projects With Us!

We share teacher and student stories, BL events, other partner events, awesome STEM stories from around the world, our own Brilliant STEAM stories from around Atlantic Canada and Beyond!

Sharing tips:

- Make it public! If your post is not public we can't see it even if you tag us
- Tag us! You can find us [Facebook](#), [Twitter](#), [Instagram](#), [YouTube](#) and [LinkedIn](#)



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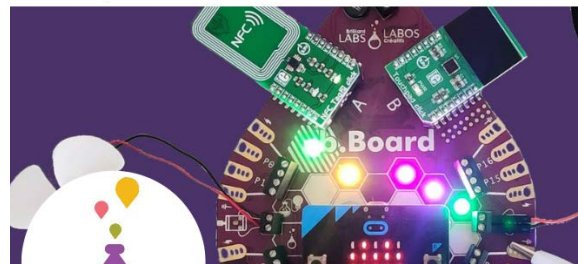
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Find More and Contact Us

Explore all our programs and keep up to date by bookmarking [BrilliantLabs.ca!](#) Plus, if you want to connect with us anytime visit our [Contact Us](#) page or email us at info@brilliantlabs.ca. We're looking forward to working with you and your students.

Sometimes it's nice to talk to someone live. We're here to answer your questions or connect you with a specialist in your area. Let's talk, give us a call 506-442-9059.



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