Patch

2025 Impact Report

Our Partners

Patch

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Tom's Letter

Dear Friends and Supporters,

In 2025, Patch runs our seventh summer accelerator. You may remember our first programme in 2019, which was very much an experiment - we put 12 extraordinary young people in the same room and asked them to build something cool. We had a lot to learn, but we were absolutely confident that gathering Ireland's most talented youth and supporting them as best we could would lead to something extraordinary.

Where are we now? As of today, we have over 200 alumni. Some are waiting on Leaving Cert results and others have hit escape velocity. Patchers have won 95 awards at the Young Scientist Exhibition, including seven overall winners, three Patchers have been selected for MIT's Research & Science Institute, and Patchers have launched 34 startups, raising more than $26M in funding.

Patch's own activities have expanded to include a grants programme, a San Francisco Fellowship and TECS, a national talent search run in partnership with ISE. Alongside these core programmes, we now support a growing set of alumni-run initiatives aligned with our mission, such as RoboWars, Demos Anon and Give(a)go. Patchers are naturally emerging as leaders and instigators in different communities, and their footprint will only grow with time. This flywheel has taken off in the past 18 months, and nowhere as clearly as within Patch, where alumni will run all 2025 programming, led by alums Tim Farrelly (2020) and Lucy Daly (2023).

None of this is possible in isolation. Patch relies on so much goodwill and support in every area of our work. To all of the Patch mentors, speakers, funders and partners reading this: Thank you. We sincerely appreciate every iota of time and energy you give to help us, and to help Patchers. A special thank you to our funders and major partners: Stripe, Dogpatch Labs, OpenAI, NDRC, Abbey Capital, Brian Kingham, Craig Falls, Mark Cummins and Rob Granieri.

I believe that encouragement, along with community, is the most important thing Patch offers. We don't tell Patchers what to do, but we do try and show them that the sky is the limit. This happens through a thousand different interactions; a mentor challenges a team to think differently, teammates egg each other on to attempt something they wouldn't have done alone, or an older - or younger! - Patcher sets an inspiring example. Anybody with exceptional gifts is always at risk of settling for the status quo. The only remedy for this is a community that constantly encourages you to take your ideas and ambitions seriously. Patch's mission, and great challenge, is to provide this to every talented young person, and give them a real chance to realise their potential.

Tom McCarthy,
Founder and Chairperson

Patch

Our Mission

To identify the most talented young people in Ireland and accelerate their journey in becoming the builders, inventors and leaders of tomorrow.

We create programmes and community that raise the ambitions of talented youth, increase their confidence in pursuing those ambitions, and create more opportunities for them to succeed.

Our Values

These five principles guide everything we do at Patch:

1. **Patchers first**
Above all, we exist to serve and support our participants. Their overall wellbeing comes first, followed closely by their intellectual and professional development.
2. **Raise the bar**
We encourage Patchers to aim for global, rather than local excellence, and to pursue that same standard in our programmes.
3. **Lead with respect**
We value honesty, kindness, and integrity in all we do.
4. **Work from first principles**
We question assumptions and build from the ground up. Very few organisations have solved the problem of
5. **Act fast, learn quickly**
We ship early, stay curious, and treat everything as a learning loop.

We're not a startup programme, and we welcome every bold project: art installations, open-source software, community labs; anything that pushes the world forward.

Why Community Matters

Progress accelerates in the right environment. Patch brings together talented young people, mentors, and alumni in a supportive network that lasts well beyond the summer programme. Within this community, peers challenge each other to aim higher, mentors provide guidance and encouragement, and alumni share experience and opportunities. Surrounded by people who believe in their potential, participants achieve more, faster - and carry that into the future.

Impact in Numbers

Patch

2019 - 2025

Our Growing Community

200+
Alumni

40%
From Outside of Dublin

13%
From Deis Schools

18
Average Age

35%
Women

Building the Future

1 in 4
Founded a community, social enterprise or company

34
Startups Launched

€28M
Raised

15
Featured on Ireland's 30U30

12
Companies co-founded by Patcher Teams

Excellence in Science & Research

95
Young Scientist awards

26
International STEM Competition Awards

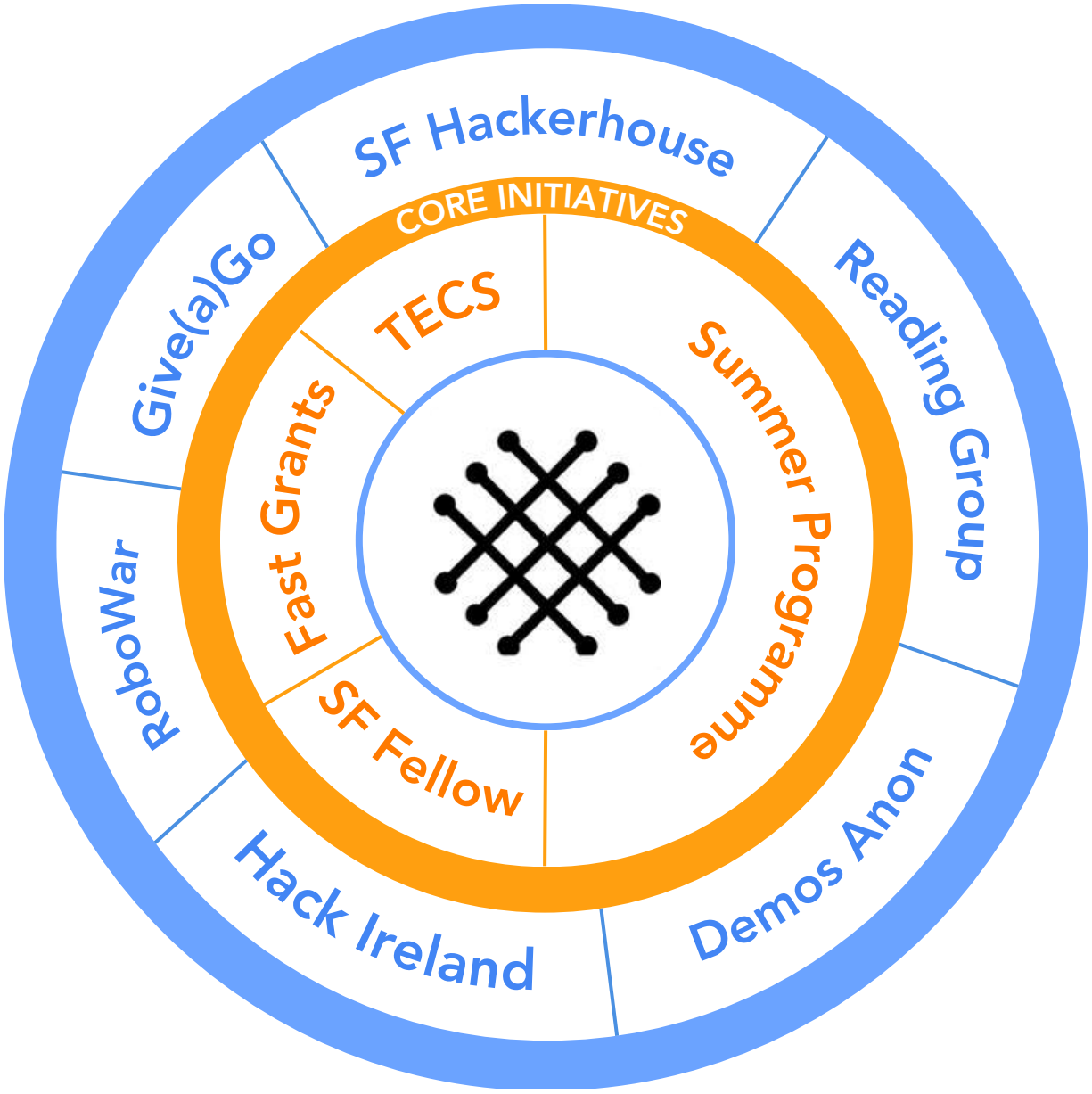
9
Patent Holders

3
Selected for MIT's Research Institute

The Patch Universe

A growing set of programmes, communities and events

Patch began as a summer accelerator for a handful of young builders. Six years on, it has grown into a year-round Patch Universe made up of interconnected programmes, events, and alumni-led communities that give Ireland's most ambitious young people the peers, resources, and belief to aim higher. Core programmes like the Summer Accelerator, SF Fellowship, Fast Grants, and TECS now sit alongside alumni-led initiatives like Hack Ireland, Eirspace, RoboWars, and Demos Anon.



From one programme to a self-sustaining ecosystem

Alumni-led projects now make up a big part of the Patch Universe. We back them with funding, space, and operational support - knowing that every new event or community they start gives more young builders the chance to meet, learn, and build together. This cycle of alumni creating opportunities for others is how Patch's impact compounds over time.

Alumni Testimonial

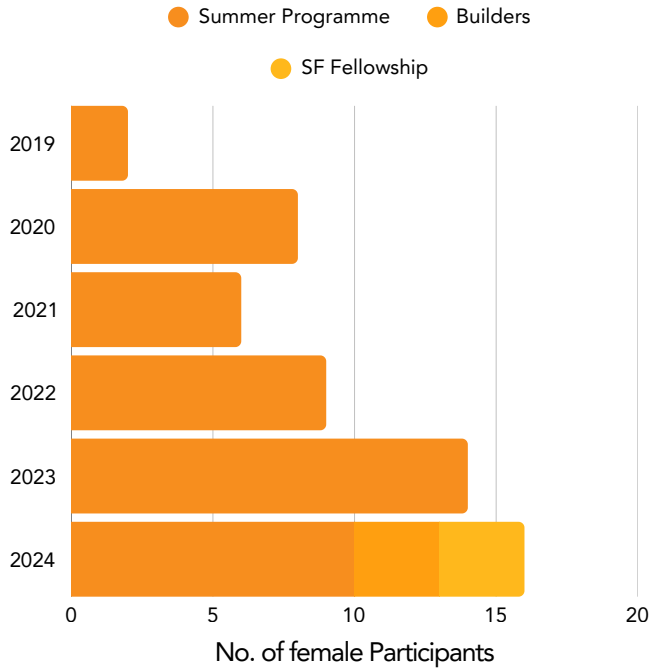
Patch

"Growing up in rural Kerry, I've never really had anyone to talk to about the things I'm interested in, like genetics and AI. But during Patch, I met so many amazing people and I didn't feel alone anymore. It meant the world to me."

- Conor Casey, Patch 2020

Closing the Gender Gap

Patch



teenturn

This year **102** of our applications were from women, we feel we can do better. By partnering with organisations like **TeenTurn**, running women only coding events and doing direct reach outs to encourage talented young girls to apply - we are consistently trying to encourage more women to do Patch and to stay involved in the alumni network afterwards.

35%
of alumni are women

60+
At our women only coding event

102
Applications from women in 2025

Summer Programme

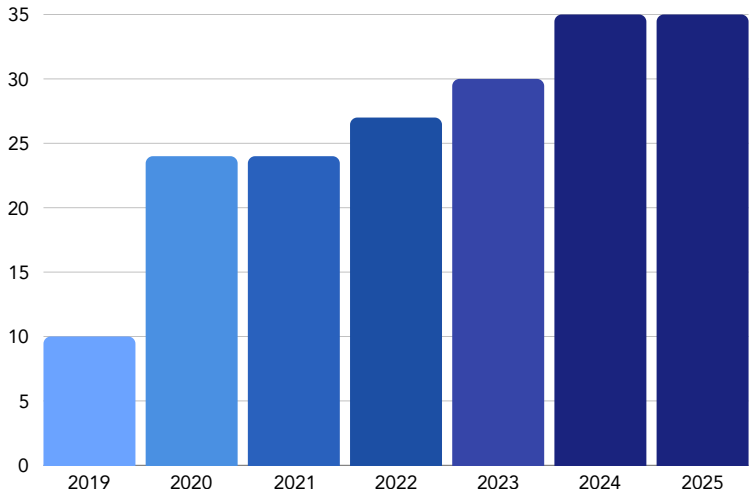
Patch

Patch is a non-profit community for Ireland's most driven young builders aged 16-21. Our flagship 7-week **Summer Programme** brings together makers, coders, and creatives who form teams, build prototypes and products, and present on **Demo Day** to an audience of investors, founders, and policymakers. Every participant receives accommodation, meals, and a needs-based stipend so that talent, not resources, determines success.

Past projects include

- Rapid malaria blood testing
- Novel water filtration
- STEM Education toy
- A smart mirror
- Government document translation services
- Robotic arms (and a dog)

Cohort size over the years



185 Total Participants

Summer Programme

Patch

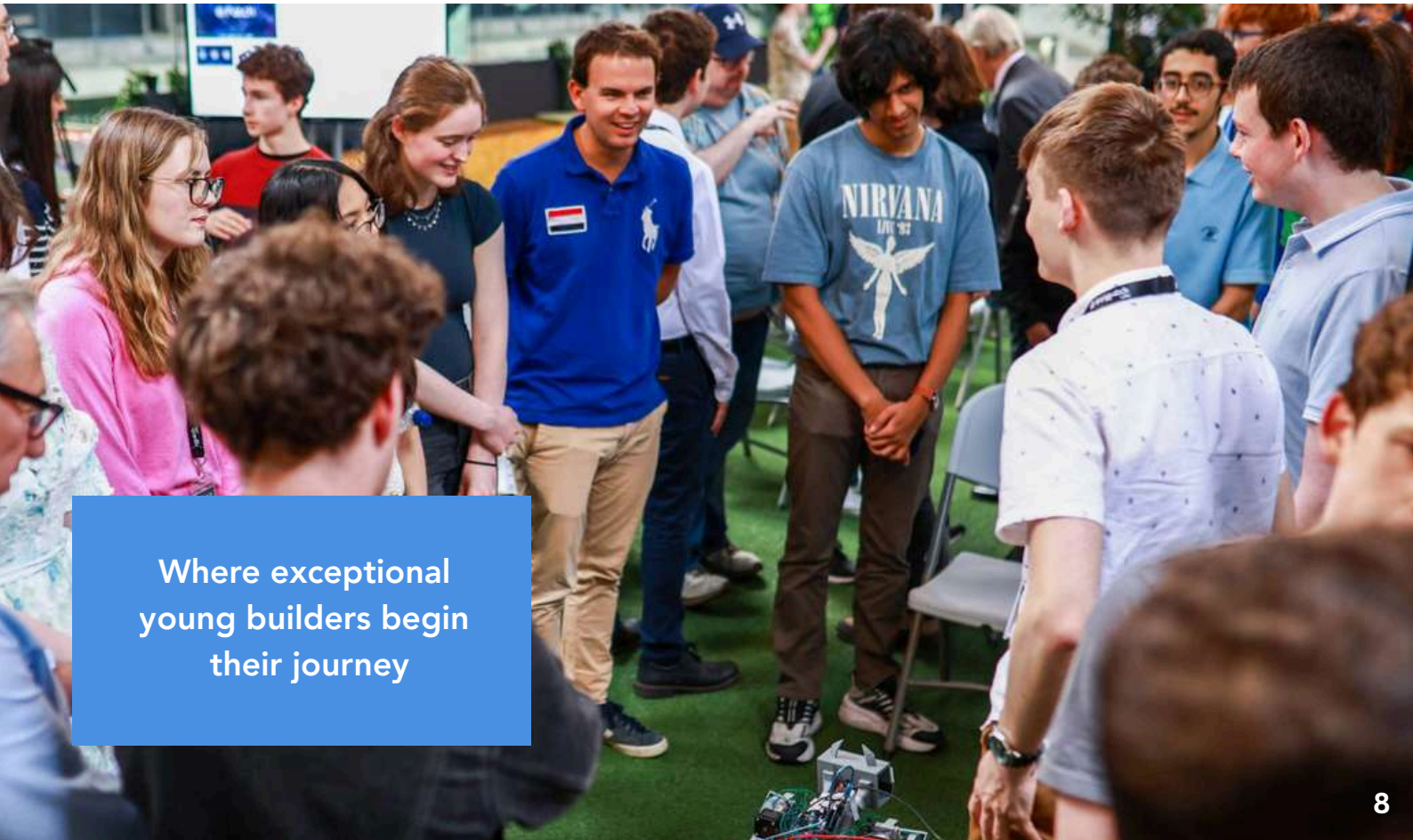
2024 Cohort Feedback

95.2%
Increased Ambition

95.2%
Increased Confidence

100%
Broadened Perspectives

100%
Would recommend Patch to a Friend



Where exceptional young builders begin their journey

Projects after Patch

Patch

Field of Vision | Patch 2020

Tim Farrelly, Omar Salem & David Denneher

Field of Vision, founded during Patch 2020, helps visually impaired fans feel live sport. Using stadium cameras and AI, it tracks play in real-time and drives a handheld "tactile tablet" where a magnetic ball mirrors the ball's position, with haptic cues for shots, tackles, and goals.
The team has deployed their devices in Marvel Stadium in Australia, with more soon underway, running pilots for the FIFA World Cup, and the Rugby Six Nations. They were named one of TIME's 100 Best Inventions and won the Irish Student Entrepreneur Awards.

Induct

Samir Bioud, Sam McCay, Will Donnelly, Fergal Desmond & Ryan Morrisey

Induct, launched by four young Patchers at Patch 2023 Demo Day, is reinventing building access for small and mid-sized facilities. Traditional swipe-card systems are costly, complex, and vendor-locked; Induct's plug-and-play controller retrofits legacy doors in under 15 minutes, connects to the cloud, and cuts total ownership costs by up to 75%.
In 2025, Induct became the youngest team accepted to the NDRC Accelerator after a live hardware demo. Pilots are now under way with a number of Irish offices.

TECS

Patch

Patch × Immersive Software Engineering UL

Technologists, Engineers, Creatives, Scientists (TECS) is a one-month competition that invites TY, 5th and 6th Year students to turn rough ideas into working technology, science or engineering projects. Teams iterate quickly toward a prototype - or a full product - and **are judged based on how much progress** they make over the course of the competition.

Why it matters

The programme lets teens explore real product cycles, meet engineers, and have projects judged on merit. Patch builds community; ISE at UL provides lab access and expert support. Together we give students a first taste of shipping at start-up speed.

How it works

1. Sign up from anywhere in Ireland
2. Kick-off workshop on campus at UL
3. Submit weekly progress updates with mentors drawn from Patch alumni and ISE faculty
4. Pitch at the final showcase day in front of a panel of judges

Key numbers from the programme

- Entering its 4th year, running since 2021.
- 85 students and 50 secondary schools represented in 2024
- Prizes of up to €2,000 for the top student team and up to €1,000 for their school.

"It is because of TECS that I found out about Patch. I hadn't realised the extent of the community, but TECS offered me the opportunity to meet like minded people who loved building things, just like myself."

Con Kirby (TECS 2024 Winner & Patch Cohort 2025)

Patch Grants

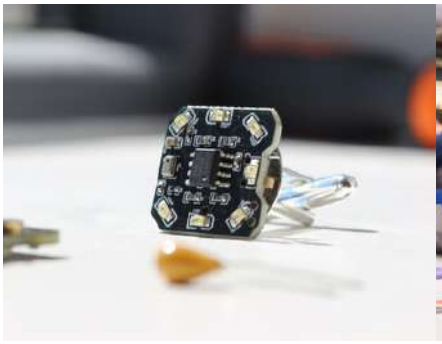
Quick, flexible grants for young people to build cool projects

In 2024 we introduced Patch Grants: €200 to €1,000 grants for 13–19 year olds in Ireland that can be used to build hardware projects or pay for compute, initiate new events, and to pursue unique learning opportunities. If suitable, grants are accompanied by mentoring and check-ins with the Patch team, to whatever extent is helpful. Patch Grants are open to any Irish 13-19 year old, not just the alumni of our other programmes.

Small, whimsical projects can teach much, spark larger ambitions, and start the portfolio that launches a career. We think the grants have impact in two ways: First, they help remove financial barriers, which are often harder to overcome for people that are just starting out. Second, winning a grant helps motivate the grantee to finish the project, which entails much more learning than leaving it half-completed.

To date, we've awarded €3,500 to six young people, covering travel to international conferences, kickstarting student-run events, and supporting self-driven prototypes. This year, we're scaling up, with plans to award an additional €10,000 to help more young people seize opportunities and bring ambitious ideas to life.

Patch Grants




Aditya Joshi ‘24 - Smart Cufflinks

With his graduation coming up, Aditya Joshi thought it would be fun to spice up his outfit for the day. He had never worn cufflinks before and loved the idea & aesthetic of them but there wasn’t enough of a wow factor got to thinking about what else he could make. Cuffed are custom made cufflinks with an 7 LED array which react to sound intensity, powered by a coin cell battery and a micro controller - all in a tiny 17MMx17MM footprint.

Sanat Thukral ‘23 - Community lead builder workshops

Give(a)go was set up by Patch alum, Sanat Thukral. These are community workshops that let people of all skill levels learn how to build everything from AI Agents to multiplayer games. Patch funded the first events, helping them gain momentum, showcase their impact, and build credibility. Today, Give(a)go is supported by leading startups and tech companies who now fund the workshops on a regular basis.


Tomás Markey 23' - An Air Filtration System

Through his research, Tomás Markey found that direct air capture (DAC) was promised to be one of the world’s biggest tools in tackling climate change with bodies like the CPCC and Paris Agreement counting on 10 billion tonnes being removed with this tech per year by 2030. Just one problem - the technology wasn't there. This motivated him to work on his own solution which went on to win **Best Individual at BT Young Scientist** and secure an **Emergent Ventures** grant.

Hack Ireland

Patch

What is it?

Hack Ireland is a 30-hour overnight hackathon bringing together 150 of Ireland's most talented student engineers and hackers to build ambitious software and hardware projects. It's fast, intense, and full of energy.

Why does it matter?

Founded and run by Patch alumni, Hack Ireland's mission is to normalise building among young Irish technologists - making ambitious technical projects the norm, not the exception. Backed by sponsors like **Stripe, Intercom**, and **OpenAI,** it offers over €25,000 in prizes. At the inaugural hackathon, there was *more code written at 5 am than 5 pm*!

What did they build?

- AI powered doctor
- An autonomous LLM Wikipedia that endlessly writes and links articles
- AI Copilot for CAD (Computer Aided Design)
- Online subscriptions manager
- NLP bias checker for scrolling

Robowars

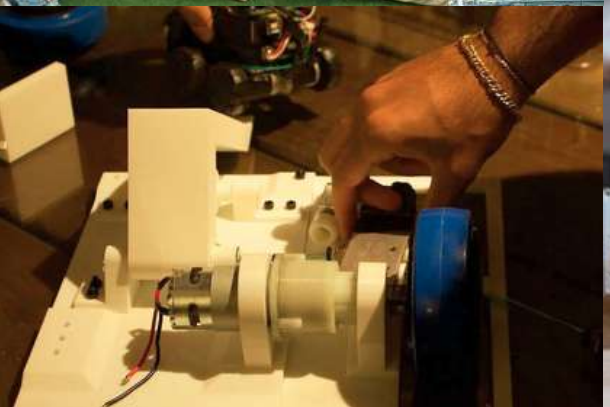
Patch

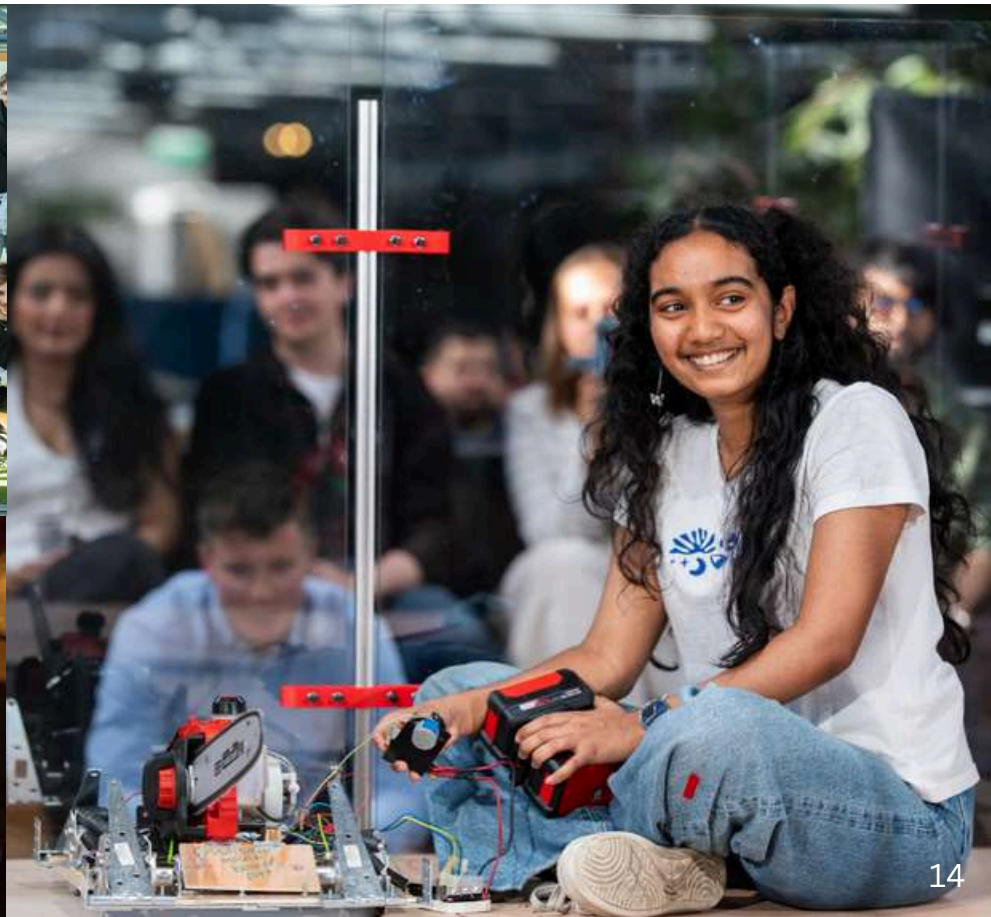
Ireland's premier hardware competition

What began in 2024 as a casual alumni meet-up with four student-built robots has exploded into one of Ireland's most anticipated maker contests. This year, lead by 2023 alum **Alex O'Sullivan**, over **150 applicants** vied for a place in the arena, with each team receiving dedicated workspace and **€600** to turn sketches into steel.

The results were as inventive as they were destructive: bots with roof-mounted chainsaws, rigs that blasted music between hits, metre-long flippers built to launch rivals clear of the floor, even a dog-shaped machine armed with razor-sharp teeth. Sparks flew, crowds cheered and repair tables buzzed late into the night, proof that Patch alumni do not just write code, they bend metal, burn circuits and learn fast under real-world pressure.

RoboWars now anchors our hands-on engineering calendar, showing future Patchers that ambition and a box of parts can create something unforgettable.





After the Summer

Patch

Next Steps

After Patch, alumni take ambitious next steps - some continue their education or research at places like MIT, Princeton, Cambridge, and Columbia. Others gain backing from programmes like Emergent Ventures, 1517 Fund, and NDRC, giving them the resources and freedom to pursue their own ideas, launch ventures, or explore new fields.

Massachusetts Institute of Technology
UNIVERSITY OF CAMBRIDGE
UNIVERSITY OF OXFORD
COLUMBIA UNIVERSITY
Trinity College Dublin
The University of Dublin
NDRC
1517
George Moore Scholars
LAIDLAW FOUNDATION
MERCATUS CENTER
George Mason University

Successful Startups

1 in 4 have also gone on to start their own company ranging from hardware, medtech, software companies and social enterprises.

Ulysses
Ecosystem Engineering Inc.
Script FORMS
Kreoh
Induct
KEPRI
Wavey daze
Sea the change
CropSafe
FIELD OF VISION
VapeBox
MicroDoc
INFEREX
gG

Our Alumni

Patch

Where Patch begins to compound

Walk into any Irish tech hubs or international science fair and you'll find a Patcher. In six years we've gone from 10 teens at borrowed desks to 200+ alumni who still trade midnight code reviews, build robot arms together and fly across borders to ship ideas. The next pages capture that energy: tactile sports tech, plug-and-play door control, garage-grown climate hardware: proof of what young builders can do when they have permission and a community.

Diana Hrisovescu
Awarded $100,000 O'Shaughnessy's Fellowship 2020

Aidan McNeill
Engineer at Firefly Aerospace 2024

The Irish Independent, "Ireland's 30 under 30" 2025
Liam Fuller (CartShare), Sam McCay (Induct), Will Donnelly (Induct), Fearghal Desmond (Induct), Samir Bioud (Induct)

Our Alumni

Patch

Aditya Joshi (right) '24

Winner of the European Young Scientist at EUCYS 2022

Maura Moore-McCune '24

National Winner of SciFest 2024

Vedh Kannan '22

Research at MIT Research Science Institute

Tara Mulhall '23

Won BT Business Bootcamp 2023, now studying robotics

Sean O'Sullivan '24

Awarded 2nd at EU Contest for Young Scientist 2024

Tomas Markey '24

Awarded Best Individual at BT Young Scientist Exhibition

Scientific Excellence

Patch

We do not just focus on start ups but scientific research and pushing the bounds of what's possible. Over the past 6 years, we have had:

95
Young Scientist Awards Won

5
European Scientist Winners

41
Scifest Awards

18
Emergent Ventures Grants

Ayush Tambde 22'

Computational Biologist & BTYSTE Grand Prize Winner (2023)

In 2023 Ayush won Best Individual at the BT Young Scientist & Technology Exhibition for a project analysing single cell phosphoproteomic data to model and potentially control oncogenic transformation in breast cancer. He has since co-authored a peer reviewed study with Systems Biology Ireland that applies a cSTAR modelling approach to stratify breast cancer phenotypes and suggest therapeutic strategies. Backed by an Emergent Ventures grant, he is pursuing ambitious research and building connections with scientists in the United States. Twice named to the Sunday Business Post's "30 Under 30" in tech, Ayush's early success and sustained interdisciplinary focus mark him as one of Ireland's most promising young scientists.

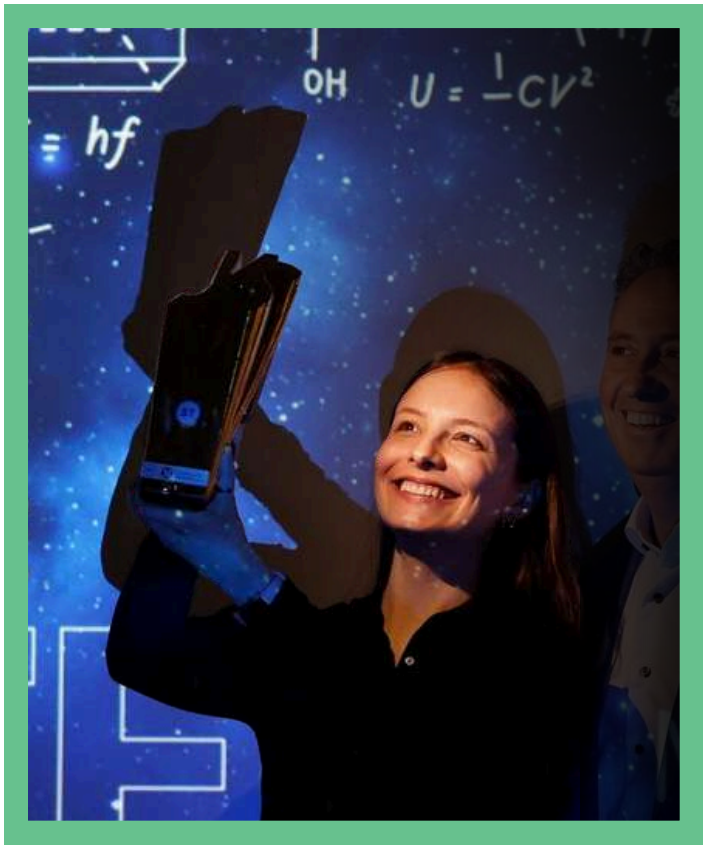
Scientific Excellence

Patch

Diana Bura ‘19

Neuroscience PhD

Diana Bura is currently pursuing a PhD in Computational Chemistry at Trinity College Dublin, where she uses advanced modelling techniques to study molecular interactions and quantum behaviour. She was awarded first prize at the European Union Contest for Young Scientists for her secondary school project, which explored how small molecules interact with DNA - work that has implications for drug development and cancer research. Diana continues to apply deep scientific thinking to complex problems, building on a foundation of internationally recognised research excellence.



Nicky Pochinov ‘20

AI Researcher

As a teenager, Nicky represented Ireland at both the International Mathematical Olympiad and the International Chemistry Olympiad. A Naughton Scholar, he went on to study Theoretical Physics at Trinity College Dublin, where his final-year project explored machine learning for many-spin quantum systems. Since then, he has focused on AI alignment research. His work, published on topics such as modularity in transformers, neuron separability, and machine unlearning via selective pruning, has been presented in San Francisco, Tokyo, and London, and has a growing number of citations. His research has been funded by the Long Term Future Fund and he works as a collaborator leading AI Safety researchers at Anthropic.

SF Fellowship

Patch





Immersion in San Francisco's Startup Culture

The San Francisco Fellowship is a 10-day deep dive into the world's most concentrated hub of startup energy. 10 standout Patchers spend their days inside YC-backed companies, meeting founders at leading tech firms, and exploring the workshops, offices, and hacker houses where tomorrow's breakthroughs are being built. They visited **OpenAI** in their Head Quarters with CSO **Jason Kwon**, met **Patrick Collison** for lunch and then headed to the **Stripe Office** for a Q&A with **John Collison** Beyond the planned visits, fellows carve their own paths, setting up 1:1s, chasing curiosities, and immersing themselves in the city's pace and ambition.

Why do we do it?

To hard-wire the SF mindset, bolder goals, faster cycles, radical optimism, into Ireland's most promising builders. Fellows fly home with bigger ambitions, a new network of Bay-Area contacts, and the conviction that the next world-changing company can start on Irish soil.

"I met industry leaders in tech, gaming, and AI, built awesome friendships, and developed a strong network of investors. Being on the ground in San Francisco gave me a real sense of the scale and ambition of business in the Bay Area."

-Daniel Chis, SF Fellowship 2024

Building in the US

Patch

This summer, a small group of Patch alumni rented a house on the beach in SF and opened it up as a summer drop-in space for any Patch alumni passing through. Throughout the summer, they met other founders, Y Combinator Start Up School and Web Summit in Vancouver (after having breakfast with the founder and convincing him to give them free tickets!) We supported the group through fiscal sponsorship and warm introductions where helpful but what we're most proud of is that this trip happened because of the community. Patch has become a place where ambitious people find each other, dream bigger, and self-organise - even across cohort years - into lifelong collaborators and friends.

Jamie Palmer '20

CTO & Co-founder, Icarus Robotics | Building Robots for Space

Jamie attended Trinity College Dublin, where he studied Mechanical Engineering and won a Laidlaw Leadership & Research Scholarship for designing a vapour-compression distillation device to tackle heavy-metal contamination in drinking water. Before pursuing his M.S., he deployed UV-disinfection hospital robots with Akara and completed a vehicle-dynamics internship with Mercedes-AMG F1. Awarded a George Moore Scholarship, he then completed an M.S. in Mechanical Engineering at Columbia University, specialising in dexterous robotics in the ROAM Lab. In 2024 Jamie co-founded Icarus Robotics through Entrepreneurs First to create a "robotic labour force for space". Icarus already holds design partnerships with two commercial space-station operators and NASA's iMETRO team. As CTO he leads manipulation-system design and autonomy, applying lessons from robotics in both medical and motorsport contexts to zero-gravity environments.

Building in the US



Colm O'Brien '19

Co-founder & Chief Engineer, Ulysses Ecosystem Engineering | Building Robots for the Ocean

Colm first made his mark at Trinity College Dublin by captaining Formula Trinity, the student team that built Ireland's first home-grown race-car in 10 years to pass scrutineering in test and compete at Formula Student UK in Silverstone – despite the lowest budget on the grid. After graduating in Mechanical Engineering, he pivoted to climate tech, co-founding Ulysses Ecosystem Engineering, which builds underwater drones that collect and sow seagrass seed, restoring marine habitats up to 100× faster than manual planting. In November 2023 the Dublin-and-San-Francisco-based startup emerged from stealth with a $2 million after reaching $1 million in revenue independent of this raise. They have since raised an additional $8 million in their seed round.


Micheál McLaughlin '19

Co-founder & COO, CropSafe | Northern Ireland's rising Ag-Tech Voice

Raised on a farm in Magherafelt, Micheál co-created CropSafe as a school science-fair idea to detect crop disease from satellite imagery. Early hackathon wins landed the teen founders places on the Patch accelerator and, later, Catalyst's Invent programme, where their AI-driven platform reached the national finals while they were still in sixth-form. In 2022 CropSafe raised a $3 million seed round and opened its US HQ in Los Angeles to serve row-crop farmers across the Midwest. The software ingests multi-spectral satellite data, weather feeds and soil telemetry to give farmers plain-English alerts ("Nitrogen stress likely in Field 12 tomorrow") instead of raw indices. Micheál oversees operations and go-to-market, splitting time between Belfast and California.

Support and Thanks

Patch operates on a foundation of philanthropy, volunteerism, and alumni giving back.

- The full time Patch team are all alumni
- Patch recruitment and admissions process is 100% alumni ran
- Dozens of mentors and speakers give their time freely

We're grateful to every sponsor, mentor, donor, parent, and Patch community member who makes this possible.

Our Partners

With additional support from Mark Cummins, Brian Kingham and Craig Falls.

We are grateful to have received funding in the past from Bobby Healy, Brian Caulfield, Ray Nolan, Liz McCarthy, Rob Granieri, Joe Liemandt, the Naughton Foundation, Rachael and Fergal Naughton, Finn Murphy and Nebular, Stuart Coulson, Emma Waldron Chen, and Emergent Ventures.

Get Involved

Patch

Patch is made possible by a network of believers: people and organisations who invest in the potential of our future leaders.

If you believe in backing young talent with bold ideas, we'd love to talk. Whether through sponsorship, mentorship, hardware donations, or something entirely different, your support will help unlock the next generation of breakthroughs, and the people that will make them happen.

Please fill out the above form to express interest in supporting Patch and a member of the team will be in touch shortly. Alternatively, you can contact us at team@joinpatch.org

Visit www.joinpatch.org for more information

Patch