FORTYGUARD Hackathon'26

THE REGION'S LARGEST PHYSICAL AI & CLIMATE TECH HACKATHON

Discover the results of a global hackathon turning hyperlocal temperature data into working solutions, followed by 13 standout projects.

IMPACT Report & TOP 13 SHORTLISTED PROJECTS

FORTYGUARD Hackathon'26

Global Talent. Working Solutions.

FortyGuard Hackathon'26

Urban Canyon uses FortyGuard data to identify heat risks across Manhattan buildings. It analyzes heat floor by floor and recommends the most effective improvements to reduce exposure and energy use.

- **3,875** Registered participants
- **842** Registered teams
- **556** Project submissions
- **7** Challenge tracks

From participation to platform growth

The event drove roughly 10× growth in the Temperature Dashboard in one month, bringing thousands of new users onto the platform.

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A truly global community

Across Borders. Connected by Purpose.

Participants joined from more than 50 countries across six continents, bringing together students, developers, data scientists, researchers, and entrepreneurs.

- **50+** Countries represented
- **6** Continents
- **1,770** Slack community members
- **14** Mentor and judge sessions

NVIDIA · accenture · tcs TATA CONSULTANCY SERVICES · Infosys · UNIVERSITY OF CAMBRIDGE · IBM · جامعة نيويورك أبوظبي NYU ABU DHABI · WELLS FARGO

GLOBAL REACH :

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A HIGHLY RATED EXPERIENCE

- **4.5/5** Overall experience rating
- **92%** Rated the experience 4 or 5

Built for real challenges

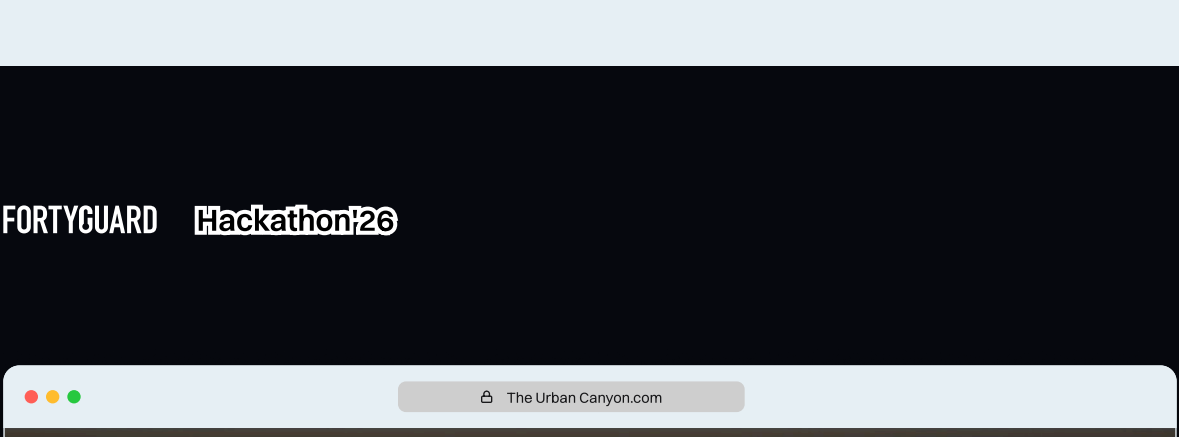
Across seven challenge tracks, participants explored how temperature intelligence could support decisions in cities, industry, and communities.

Cities & Infrastructure · Health & Public Safety · Agriculture · Buildings & Energy

Discover the Top 3 Winning Projects

Three standout solutions. Three teams pushing the boundaries of thermal intelligence forward.

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WINNER · FIRST PLACE PROJECT

THE URBAN CANYON

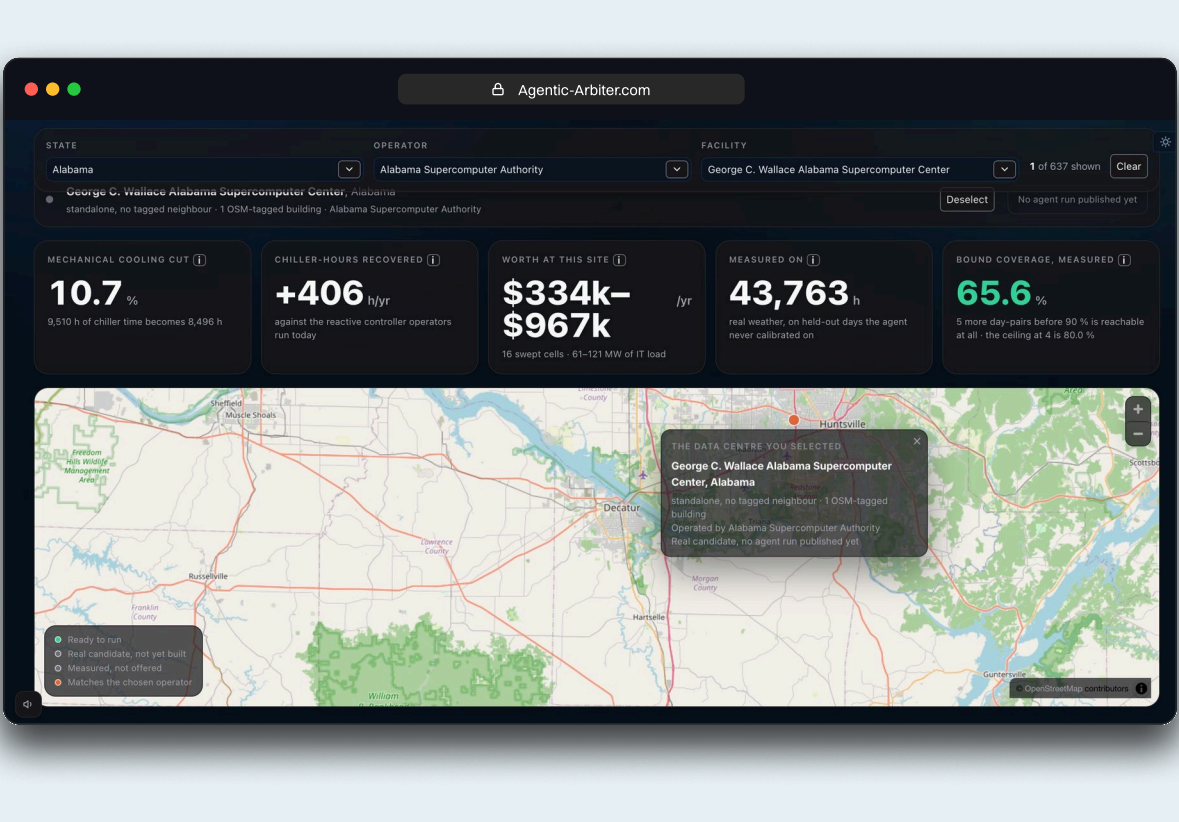
Urban Canyon uses FortyGuard data to identify heat risks across Manhattan buildings. It analyzes heat floor by floor and recommends the most effective improvements to reduce exposure and energy use.

www.youtube.com/watch?v=5onDz5RdpKI

Submitted by Ministry of Temperature
Faizan Raza
Azaz ur Rehman Nasir
Abdul Moiz Zahid Siddiqui

$3,000 USD + NVIDIA Jetson AI Dev Kit

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WINNER · SECOND PLACE PROJECT

AGENTIC-ARBITER

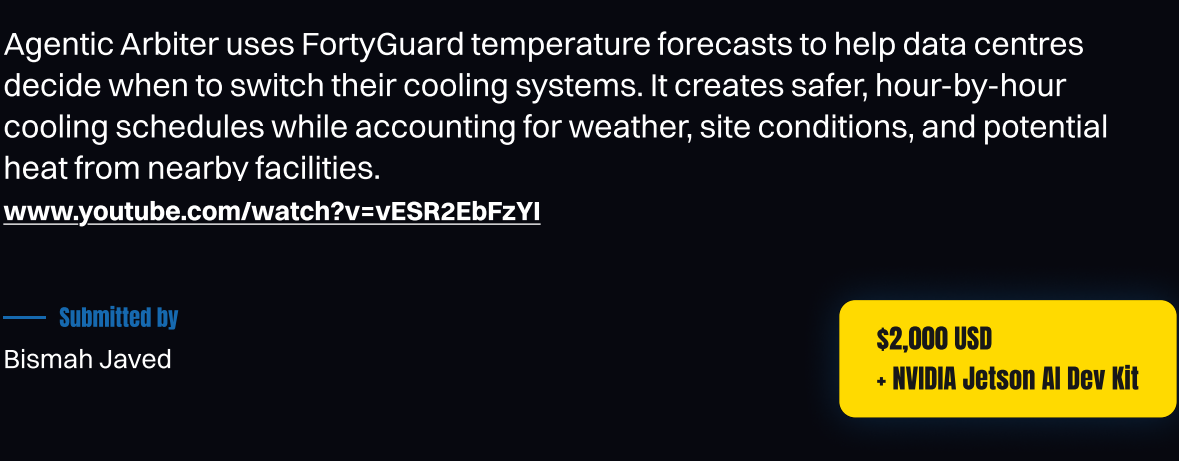
Agentic Arbiter uses FortyGuard temperature forecasts to help data centres decide when to switch their cooling systems. It creates safer, hour-by-hour cooling schedules while accounting for weather, site conditions, and potential heat from nearby facilities.

www.youtube.com/watch?v=vESR2EbFzYI

Submitted by
Bismah Javed

$2,000 USD + NVIDIA Jetson AI Dev Kit

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WINNER · THIRD PLACE PROJECT

FROSTLINE

FrostLine uses FortyGuard's multi-year temperature data to identify frost risk and recommend the best wind-machine locations. It estimates the area protected and potential crop savings based on installation cost.

youtube.com/watch?v=hVLd6DX_uKo&feature=youtu.be

Submitted by
Darin Levesque

$1,000 USD + NVIDIA Jetson AI Dev Kit

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Other Solutions

Five approaches to a cooler future.

01 · HEATTWIN

Shortlisted

HeatTwin combines Manhattan city data in a real-time 3D map to reveal how extreme heat affects buildings, people, energy, and transportation.

www.youtube.com/watch?v=UOtb74-TU60

Submitted by
Juan Diego Castaño Molina

02 · CRYONAV

Shortlisted

Cryonav uses FortyGuard temperature and environmental data to find cooler, safer walking routes and guide users to cooling shelters when needed.

www.youtube.com/watch?v=Pv_AojsFOEw

Submitted by
Oriwo Ifeanyichukwu Emmanuel

03 · SUNUP

Shortlisted

Sunup uses FortyGuard data to plan safer work and recovery schedules for outdoor crews and flag at-risk workers.

www.youtube.com/watch?v=ZdPDU9itoRE

Submitted by ThermoNav
Abdelrahman Elkaseer
Abdelhamed Ahmed Abdelhamed

04 · THERMALGUARD

Shortlisted

ThermalGuard uses FortyGuard data to recommend safer walking routes, cooling spaces, and rest stops based on personal heat risk.

www.youtube.com/watch?v=iRyxo06t11k

Submitted by
Irham Muhammad Hamzah

05 · THERMOROUTE AI

Shortlisted

ThermoRoute AI uses FortyGuard data to find cooler routes for commercial EV fleets, reducing heat-related battery degradation, energy use, and costs.

www.youtube.com/watch?v=yiy_IWF25A4

Submitted by
Dhananjay Kadge

FORTYGUARD Hackathon'26

Other Solutions

Five approaches to a cooler future.

06 · SITEMORPH

Shortlisted

SiteMorph brings FortyGuard's historical temperature data into Autodesk Forma for climate-aware design insights, reports, and workflows that extend into Revit.

www.youtube.com/watch?v=a04y9w_1i28

Submitted by
Vetri Kalanjiyam B

07 · VEINGUARD

Shortlisted

VeinGuard uses FortyGuard temperature data to predict heat-related risks in drinking-water networks and recommend operational changes to protect water quality.

www.youtube.com/watch?v=-3DZYFr8d08

Submitted by Benjamin Nkem
Benjamin Nkem
Daniel Adejare

08 · COOLWORLD

Shortlisted

CoolWorld combines FortyGuard temperature data and AI forecasting to predict persistent urban hotspots, helping cities prioritize areas for review.

www.youtube.com/watch?v=bng4cyD1pKo

Submitted by
Riya Basak

09 · GROUNDSWELL

Shortlisted

Groundswell combines FortyGuard temperature data and health-risk modeling to predict heat-related hospital demand, helping hospitals prepare staff and resources early.

https://screen.studio/share/8JruYzH8

Submitted by Groundswell
Benjamin Algreen Adler
David Algreen Adler

10 · SATALITE

Shortlisted

SatAlite uses FortyGuard temperature data to monitor concrete curing, assess strength development, and identify cracking risks for safer construction.

www.youtube.com/watch?v=-SWd1iMZRhs

Submitted by FCBaronions
Muaz Ismail Mohammed
Krish Raj
Muhammed Razan

FORTYGUARD Hackathon'26

One intelligence. Many possibilities.

FortyGuard brings temperature intelligence to the physical world, helping people understand local conditions and turn them into informed decisions.

During Hackathon'26, builders used FortyGuard's hyperlocal temperature data to develop solutions across cities, data centres, agriculture, healthcare, construction and mobility. Their projects demonstrated how the same intelligence can support different challenges, applications and ideas.

Cities · Data Centres · Agriculture Healthcare · Construction · Mobility

• Building The Worlds Temperature Module

"Every building, farm and city should be able to anticipate temperature and act on it. We're building the temperature world model to make that possible. This hackathon showed how many different things people can build with the same intelligence. I believe entire companies will be built on it. Our ambition is to make temperature part of how the world designs infrastructure, operates machines and invests in its future."

Jay Sadiq
Founder & CEO, FortyGuard

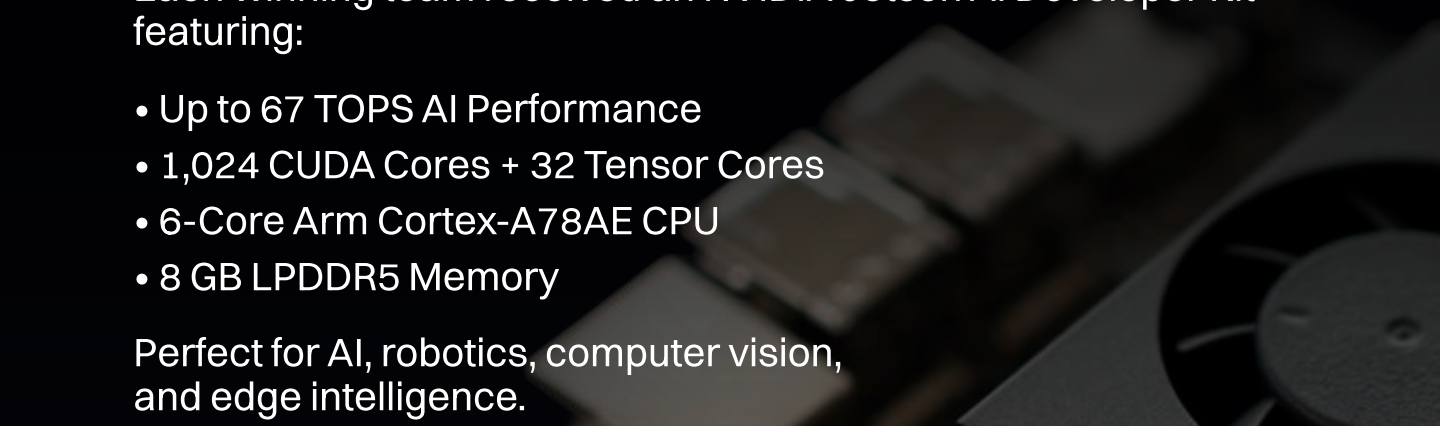
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NVIDIA PRIZES FOR OUR WINNERS

Each winning team received an NVIDIA Jetson AI Developer Kit featuring:

- Up to 67 TOPS AI Performance
- 1,024 CUDA Cores + 32 Tensor Cores
- 6-Core Arm Cortex-A78AE CPU
- 8 GB LPDDR5 Memory

Perfect for AI, robotics, computer vision, and edge intelligence.



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Meet Your Judges & Mentors

Konstantin Cvetanov
AI Factories
NVIDIA
Youtube session
JUDGE & MENTOR · LINKEDIN PROFILE

Ahmed Abdelkhalek (AK)
Digital Natives, Startups & VCs — UAE, North Africa & Levant
Google Cloud
Youtube session
JUDGE & MENTOR · LINKEDIN PROFILE

Vikram Venkat
Principal
Cota Capital
Youtube session
JUDGE & MENTOR · LINKEDIN PROFILE

Professor Jonathan Reichental
Founder
Human Future
Youtube session
JUDGE & MENTOR · LINKEDIN PROFILE

Sandra Leyva Martinez
Sr. Director of Sustainability
TEDx Speaker
JUDGE · LINKEDIN PROFILE

Dima Rachid
Leadership, Cities Studio
Gensler Middle East
JUDGE · LINKEDIN PROFILE

Jay Sadiq
Founder & CEO
FortyGuard
JUDGE · LINKEDIN PROFILE

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Meet Your Mentors

Jordana Rosa
Senior Technical Specialist
Autodesk
Youtube session
MENTOR · LINKEDIN PROFILE

Tamir Kessel
Partner, ClimateTech Growth
Cultivators
Youtube session
MENTOR · LINKEDIN PROFILE

Karol Wiszowaty
Ex-COO & Delivery Director
Develop X
Youtube session
MENTOR · LINKEDIN PROFILE

Mike Stelfox
PLA
Stelfox Design Studio
Youtube session
MENTOR · LINKEDIN PROFILE

Tarek Fouad
Founder & CEO
Narrative One
Youtube session
MENTOR · LINKEDIN PROFILE

Internal Mentors

Mudethir Elhassan
Machine Learning Lead
FortyGuard
Youtube session
MENTOR · LINKEDIN PROFILE

Fawad Shah
Software Engineering Lead
FortyGuard
Youtube session
MENTOR · LINKEDIN PROFILE

Snehil Ahuja
Product Lead
FortyGuard
Youtube session
MENTOR · LINKEDIN PROFILE

Aamir Ali
Software Engineer
FortyGuard
Youtube session
MENTOR · LINKEDIN PROFILE

Aashan Javed
AI/ML Engineer
FortyGuard
Youtube session
MENTOR · LINKEDIN PROFILE

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Reflections From Our Judges & Mentors

JUDGE
Dima Rachid
Leadership, Cities Studio Gensler Middle East

"The dashboard is very well-organized and easy to navigate for jury. The formats requested in the deliverables are excellent. The diversity of scale on which entries focused is impressive."

JUDGE
Vikram Venkat
Principal
Cota Capital

"Great communication and organization. ... Good selection of projects as well!"

MENTOR
Mike Stelfox
PLA
Stelfox Design Studio

"It could be valuable to see the participants present a value proposition with commercial viability projections."

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The Experience, In Their Words.

"FortyGuard Hackathon'26 was an immersive mentorship experience that sharpened my thinking, shaped my idea, and helped me earn second place."
Bismah Javed
Hackathon'26 Participant

"With FortyGuard's guidance, building Lookout turned hyperlocal heat data into proactive rest breaks to help protect people."
Isieno Ebenezer
Hackathon'26 Participant

"FortyGuard's reliable APIs, complete documentation, and resources helped me build a project inspired by my real-life experience."
Hamza Ali
Hackathon'26 Participant

"FortyGuard's API, clear tracks, flexible remote format, and great communication helped us focus on building our product."
Muhammad Faizan Raza
Hackathon'26 Participant

"FortyGuard's detailed heat data helped me identify 131 overlooked blocks in Phoenix and build a solution I'd want a city to use."
Sithu Nyein
Hackathon'26 Participant

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THANK YOU!