



NVIDIA DGX Spark Frontier Hackathon

📍 [Antler VC,
Austin TX](#)

📅 Dec 12 - 14

👤 In Person

Welcome to the Austin Tech Week AI Hackathon - Hosted by Nvidia & AITX! We're excited to host a diverse group of builders for a weekend.

Hacker Resources

- 🚩 [The Hacker's Cheat Sheet: NVIDIA DGX Spark \(Ascent GX10\) \(1\)](#)
- ⚡ [DGX Spark Playbooks \(1\)](#)
- ▶ [DGX Spark Livestreams \(1\)](#)
- </> [SODA 3 Developer API \(1\)](#)

Join The Discord!

This will be the easiest way to communicate with our team, get updates on the hackathon, and connect with other hackers. Please join ASAP!

SUBMIT YOUR PROJECT!

Hacker Resources

Join The Discord!

SUBMIT YOUR PROJECT!

Getting Situated

Build Challenges

Context

Partner Challenges

Judging Criteria

1. Technical Execution & Completeness (30 Points)

2. NVIDIA Ecosystem & Spark Utility (30 Points)

3. Value & Impact (20 Points)

4. The "Frontier" Factor (20 Points)

Agenda - Day 1 Dec 12th

Agenda - Day 2 Dec 13th

Agenda - Day 3 Dec 14th

Hacker Resources

Getting Situated

 Wifi & Bathrooms

 Parking Options

☰ Build Challenges

Context

Teams will choose a build challenge and come up with a solution that meets the minimum required outcomes. What you build is more open-ended because we won't be asking for a specific product to be built from the dataset. The goal is to come up with a solution that you think best meets the needs of the outcomes we want to see.

 [Traffic Incident Insights](#)

 [Factory Safety & Efficiency](#)

 [Urban Growth & Infrastructure Intelligence](#)

Partner Challenges

 [Port-to-Rail Surge Forecaster & Utilization Optimizer \(Glid\)](#)

 [The AI Research Impact Observatory - Symbio AI](#)

 [AutoHDR](#)

⚖️ Judging Criteria

Philosophy

We are judging **Systems Engineering**. A winning project isn't just a slide deck or a simple API wrapper; it is a functioning system that ingests raw data, processes it locally using the DGX Spark, and produces a valuable result.

The Scoring Breakdown (100 Points Total)

1. Technical Execution & Completeness (30 Points)

Did they actually build a working, complex system?

- **15 pts - Completeness:** Does the system successfully complete the full data workflow without crashing?
- **15 pts - Technical Depth:** Is there significant engineering "under the hood"? Did they build a complex pipeline (e.g., Simulation, RAG, Fine-Tuning, or Custom Logic) rather than just a simple static dashboard or basic API wrapper?

2. NVIDIA Ecosystem & Spark Utility (30 Points)

Did they leverage the unique hardware and software provided?

- **15 pts - The Stack:** Did they use at least one major NVIDIA library/tool? (e.g., **NIMs, RAPIDS, cuOpt, Modulus, NeMo Models**). Note: Merely calling GPT-4 via API gets 0 points here.
- **15 pts - The "Spark Story":** Can they articulate **why** this runs better on a DGX Spark?
 - *Examples:* "We used the 128GB Unified Memory to hold the video buffer and the LLM context simultaneously" or "We ran inference locally to ensure privacy/latency."

3. Value & Impact (20 Points)

Is the solution actually useful?

- **10 pts - Insight Quality:** Is the insight non-obvious and valuable? (e.g., "Traffic jams happen at 5 PM" is obvious. "Rain causes specific stalls on this specific ramp" is valuable).
- **10 pts - Usability:** Could a real Fire Chief, City Planner, or Factory Foreman actually use this tool to make a decision tomorrow?

4. The "Frontier" Factor (20 Points)

Did they push the boundaries?

- **10 pts - Creativity:** Did they combine data or models in a novel way? (e.g., Using vision models to "read" traffic maps).
- **10 pts - Performance:** Did they optimize the system for speed or scale? (e.g., "We optimized the simulation to run at 50x real-time speed").

Submission Checklist

Agenda - Day 1 Dec 12th

	<u>Doors Open + Check-in</u>	5:00 PM – 5:30 PM
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	<u>Kick Off: Welcome & Hackathon Intro</u>	5:45 PM – 6:05 PM
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	<u>DGX Spark Overview</u>	6:05 – 6:20 PM
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	<u>DGX Spark Unboxing</u>	6:20 – 6:45 PM
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	<u>Team formation, DGX Spark Checkout</u>	6:45 – 8:00 PM
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 Dinner Served (Pizza) 8:00 – 9:00 PM

 Hacking Begins 9:00 PM Onwards

Agenda - Day 2 Dec 13th

 Breakfast 8:30 AM - 9:30 AM

 </> Continue Hacking 9:30 AM - Onward

 Lunch Served 12:30 PM - 2:30 PM

 Spark Q&A 12:30 PM - 1:30 PM

 Progress Checkin 6:30 PM - 7:00 PM

 Dinner Served (Chipotle) 7:00 PM

 Overnight Hacking 7:00 PM - Onwards

Agenda - Day 3

14th

Dec

 <u>Breakfast</u>	8:30 AM - 9:30 AM
 <u>Code Freeze - Submissions Due!</u>	11:00 AM
 <u>Judging</u>	11:30 AM - 12:30 PM
 <u>NVIDIA Developer Roundtable</u>	11:30 AM- 11:45 AM
 <u>NVIDIA Developer Roundtable</u>	11:45 AM - 12:30 PM
 <u>Hack Fair Station Setup</u>	12:45 PM - 1:15 PM
 <u>Hack Fair & Public Voting</u>	12:00 PM - 4:00 PM
 <u>Finale: NVIDIA Keynote, Awards, Winner Demos</u>	3:00 PM - 4:00 PM

Hacker Resources

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If you have any questions, please email us at team@aitxcommunity.com

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