JAZZEE
Become a 10X Engineer

GENAI HACKATHON
T$O - 2025

RESILIENCE AI

Vertical AI Agents for Climate-Disaster Resilience

for Economy, Agriculture, Health, Infrastructure & Safety

Presented By: Hungry Hackers

HUNGRY HACKERS

TEAM

Jagadish P Pattanaik

Runner Up at 48 hourCraft Hackathon at RCM, Bhubaneswar
Finalist CraftNCode 2024 National Hackathon at IIIT Bhubaneswar

1st Prize in CSIR Jigyasa Vigyan Mahotsav 2022
1st COVID-19 response category, ATL App

Shubhashree Mohanty

Secured top 10% rank in “CodeKaze 2025”
Top 20 rank out of 63 teams in AlgoUstaz, ICPC-style nation coding contest, APS, NIT Rourkela

Swayam S Sahoo

2nd place @SIH’2024 Finals, Hardware Edition
AIR 359 @Coding World Cup (CodingNinjas & Logitech)

Soumyadeepta Patel

Runner Up at 48 hourCraft Hackathon at RCM, Bhubaneswar

Prayas Bharadwaj

Notable Projects in Graphics Programming, Deep Learning
HPC Programmer

HUNGRY HACKERS

OUR MISSION

"Transform reactive crisis management into proactive resilience"

Multi-disciplinary AI expertise

Our team blends expertise in NLP, computer vision, and climate modeling for robust, sector-specific AI solutions

Real-world impact focus

We prioritize practical deployments that enhance early warnings, reduce losses, and improve disaster coordination

Climate resilience at scale

Scalable AI agents ensure proactive disaster management across nations, sectors, and vulnerable populations

THE CRISIS SCALE

$182.7 BILLION
2024 US disaster damages alone

27 DISASTERS
Each causing $1B+ in losses

96 out of 193
Countries lacking adequate early warning systems

CURRENT SYSTEM FAILURES

- **REACTIVE instead of proactive approaches**
- **SILOED operations across critical sectors**
- **SLOW response times (hours vs minutes required)**
- **60% of disaster losses remain uninsured**
- **85% of critical infrastructure poorly integrated**

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MARKET OPPORTUNITY

$201.4 BILLION
AI disaster management market by 2028

70%
of AI's total value potential comes from vertical applications

500 MILLION
daily social media posts contain untapped disaster intelligence

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6 SPECIALIZED VERTICAL AI AGENTS

🌊 Climate Predictor

72-hour advance warnings

🌾 Agriculture Risk

Crop protection & optimization

🏥 Health Coordinator

Disease outbreak prevention

🚚 Supply Chain

Logistics rerouting

🏗️ Infrastructure

Damage assessment

🚨 Public Safety

Evacuation coordination

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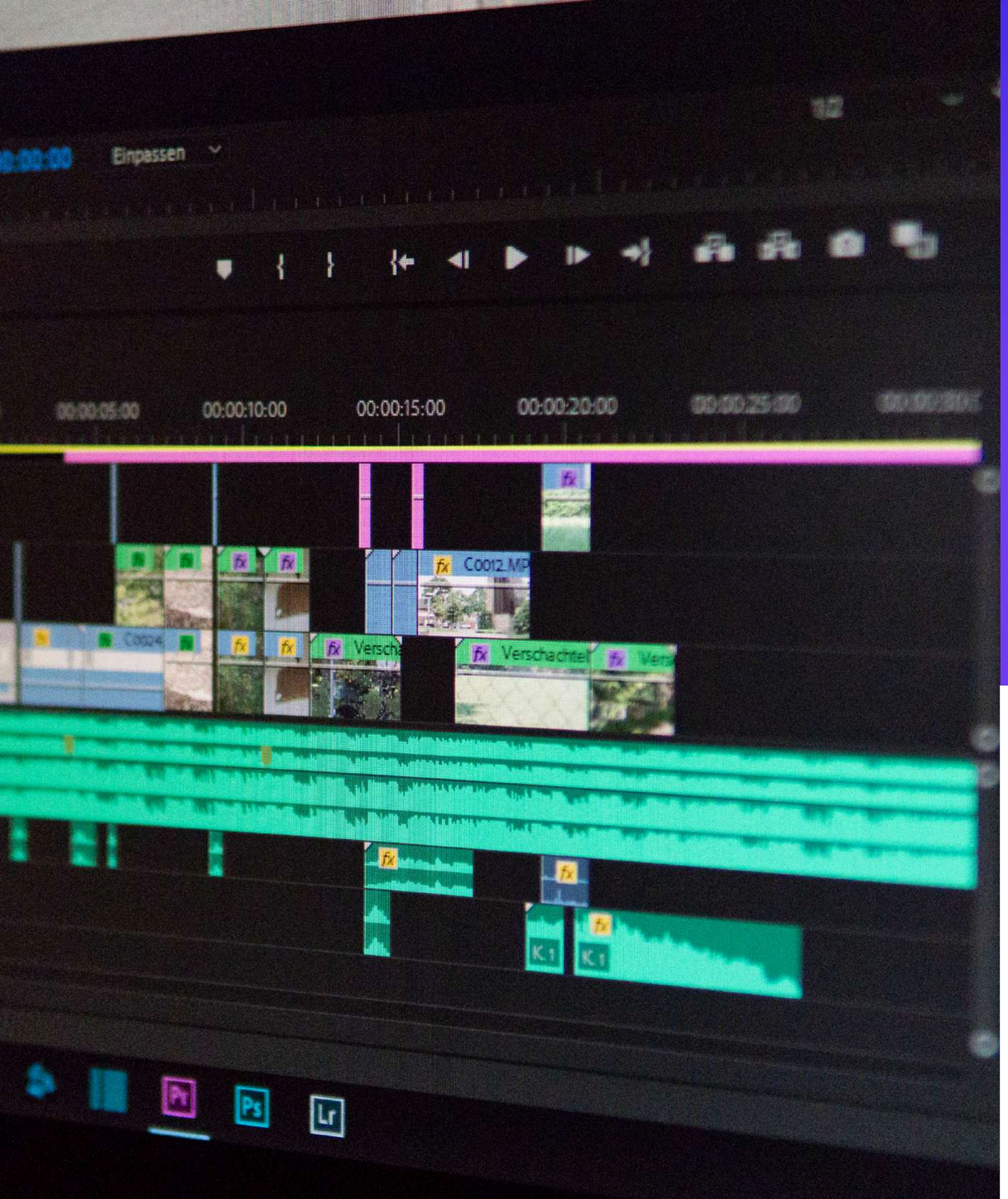
DATA SOURCES & AI PROCESSING

SATELLITE IMAGERY
→ Real-time weather pattern analysis

SOCIAL MEDIA
→ 500M posts/day intelligence extraction

WEATHER APIs
→ Open-Meteo, Visual Crossing integration

AI PROCESSING
→ GPT-4, Computer Vision, NLP, LangGraph



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- **PREDICTION (72 hours ahead)**
- **Climate agent detects rising flood risk**

- **PREPARATION (Real-time response)**
- **Multi-agent coordination activation**

- **RESPONSE (Immediate action)**
- **Coordinated sector-specific actions**

REAL-TIME COORDINATION WORKFLOW

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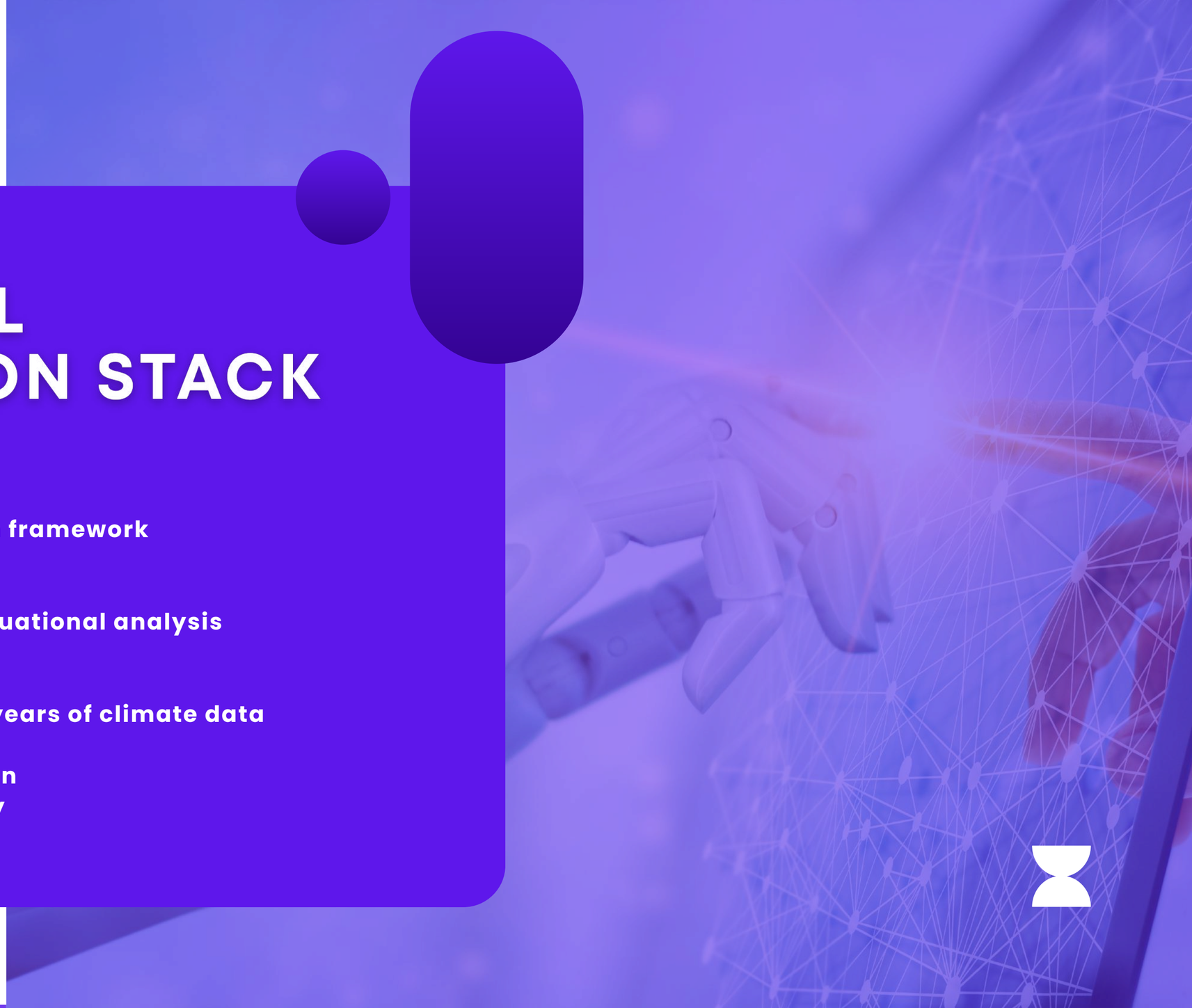
TECHNICAL INNOVATION STACK

- LangGraph Orchestration
- Multi-agent collaboration framework

- Social Media Intelligence
- Real-time sentiment & situational analysis

- Predictive Modeling
- Machine learning on 30+ years of climate data

- Cross-Platform Integration
- Seamless API connectivity



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THANK YOU!

For Your Attention

Questions and Discussion

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