# Preparing for: Call for Code AI Spot Challenge for a Safer Planet

Part 1: Scoping out a winning solution

August 3, 2021

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# Join YouTube Live

Announcement (completed, available on demand) https://youtu.be/jIKzPcufnR8

Prep session 1: Scope out a winning solution, August 3, 3pm ET https://youtu.be/2EJpu7iIPEU

**Prep session 2: Checklist and best practices. August 10, 1230pm ET** https://youtu.be/dImX77KWMNo



Announcing

Call for Code #AISpotChallenge

Join YouTube @IBM Developer

July 27, 2021, Tuesday 8am PT / 11am ET / 3pm GMT





# What is Call for Code AI Spot Challenge for a Safer Planet?

**Submission Deadline: August 18** 

- What does it mean to save a planet with AI?
- What's unique about AIpowered solutions?
- How do you use prediction and optimization?
- What can I do if I get stuck?

# What does it mean to save a planet with AI?

#### Questions to ask

- What challenges are we facing today for safety?
  - Extreme weather events
  - Old buildings and constructions
  - Public safety
  - Crimes
- How are we detecting issues now?
  - Sensors
  - Areal maps
  - Videos
  - References
- Are there ways to do this better at scale and efficiently?
  - Increase prediction accuracy
  - Automate processes
  - Optimize allocations equipment, people, processes, etc.

#### Making our planet safer with AI

Through AI-powered prediction, optimization and automation, we can help mitigate physical and cyber threats and risks. For example:

- **Predict** potential construction risks and hazardous conditions
- Develop contextual **intelligence** to share with public
- Anticipate weather events and disasters for increased readiness
- Reduce construction or worksite accidents, theft, and vandalism
- Optimize scheduling and allocations of resource and match supply and demand
- Assess **risk** and needs and deliver solutions to communities in need





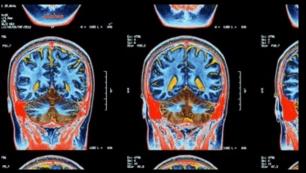
## What's unique about AI-powered solutions?

### Industry and cross-industry solution ideas

- Use imaging and video
- Automate and scale data processing
- Match supply and demand
- Predict and assess threat rapidly
- Send AI-powered equipment that is too dangerous for humans

#### **AI-Powered Solution Examples**

Deploy machine learning to deep learning, decision optimization, linguistic and virtually any other models



#### Healthcare: imaging, diagnostics and drug discovery

Speed image analytics at scale and improve patient outcomes



**Cross-industry: Cyber security and fraud** 

Detect and proactive address security incidents



Transportation: proactive maintenance and risk mitigation

Decrease maintenance costs and ensure safety



Cross industry: contact center automation

Improve experience and accelerate resolution with tonal analysis and natural language processing



Energy, utilities: shape demand and supply with resilience

Modernize energy supply, manage demand and protect infrastructure



Cross-industry: workforce and logistics management

Optimize virtual and onsite staffing with routing and assets tailored to demand

## How do you use prediction and optimization

#### Consider:

- Prediction
  - Predict where potential safety issues occur
  - Understand risk levels
  - Use prediction to make your apps smarter
- Optimize
  - Allocations of people and other resources where a help is needed most
  - Schedule tasks to resolve issues
  - Conduct what-if analysis

#### Run any AI models

Deploy machine learning to deep learning, decision optimization, linguistic and virtually any other models

Discover and predict

#### **Discovery**

- Trends & patterns
- Correlations
- Insight for hypotheses

#### **Prediction**

- Segmentation and attrition
- Contact center optimization
- Predictive/preventive maintenance
- Risk / governance / Fraud

Optimize decision

#### **Decision Optimization**

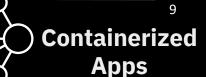
- Scheduling
- Demand and supply matching
- Allocation
- Logistics
- Pricing and category management
- Scenario planning

Continuous AI Model Governance

Multicloud

To drive action and business results in a prescriptive way

**Automated AI lifecycle management** 



### What can I do if I get stuck?

#### Call for Code®

#### AI Spot Challenge:

Submit your technology solution for Call for Code AI Spot Challenge.

Start no

ress Enter

#### "2021 CALL FOR CODE AI SPOT CHALLENGE" CONTEST PARTICIPATION AGREEMENT

NO PURCHASE NECESSARY. A PURCHASE OR PAYMENT OF ANY KIND WILL NOT INCREASE YOUR CHANCES OF WINNING. VOID WHERE PROHIBITED. ENTRY INTO THIS CONTEST CONSTITUTES ACCEPTANCE OF THIS PARTICIPATION AGREEMENT.

Participants of this event must be 18 years old or have reached the age of emancipation in the jurisdiction in which they are submitting their project, whichever is greater.

By hitting submit, you are electronically agreeing to the terms of this Participation Agreement ("Participation Agreement").

#### PONSOR:

The "Call for Code AI Spot Challenge" Virtual Hackathon, to be held starting on July 27, 2021, 12:00 am PDT and ending on August 18, 2021, 11:59 pm PDT ("Event", "Contest"), is sponsored by International Business Machines Corporation ("IBM", "Sponsor", "we", "us") and David Clark Cause ("DCC", "Sponsor", "we", "us").

#### TEAMS:



Participation Agreement

https://callforcode.org/wp-content/uploads/2021/07/Spot-Challenge-Participation-Agreement-v3.pdf

#### When you have questions:

- Read the participation agreement (part of the submission) https://ibm.biz/submitaispot
- Ask questions on Call for Code Slack
  - #ai-spot-challenge
- Find partners and mentors on Call for Code Slack
  - #teambuilding
  - #helpdesk
- Ask chat questions at AI Bootcamp
  - August 3 Data
  - August 10 Models
  - August 17 Services / Processes AI-powered apps
- Contact us by email
  - Upkar Lidder ulidder@us.ibm.com
  - Julianna Delua julianna@ibm.com



Step 1: Sign up for Al Bootcamp and attend on August 3, 10 and 17

**Step 2: Register for IBM Cloud account** 

Step 3: Join the Call for Code community

Step 4: Submit your solution by August 18

Read the blog: ibm.biz/blogonaispot



#### Judging

#### FOUR EQUALLY WEIGHTED CRITERIA

#### **COMPLETENESS AND TRANSFERABILITY**

How fully has the idea been implemented? Can it achieve an impact in the field? Can it be transferred elsewhere?

#### **EFFECTIVENESS AND EFFICIENCY**

Does the solution address a high priority area? Does it achieve its goal effectively and efficiently? Can it scale?

#### **DESIGN AND USABILITY**

How good is the design, user experience, and ease of use of the solution? How quickly can it be used?

#### **CREATIVITY AND INNOVATION**

How unique was the approach to solving a long-standing or previously intractable problem?

#### 2021 Submissions

#### **SUBMISSION FORM IS AVAILABLE NOW**

Even if you are not ready to submit – and that's OK, most teams wait until the final week – it makes sense to understand what you'll need to prepare. Open the submission form to see details on the information required and the field length limits. The deadline for **AI Spot**Challenge is August 18, 2021. Form: ibm.biz/submitaispot

#### **EXPLORE THE PARTICIPATION AGREEMENT**

This contains the complete rules, prize details, and eligibility criteria.

#### **SUBMIT NOW, UPDATE LATER**

If you think you're ready, feel free to submit your application already. If things change, just submit again later using the same email address.

#### PRIZES FOR AI SPOT CHALLENGE

GRAND PRIZE: \$15,000.00 USD

RUNNER UP PRIZE: \$5,000.00 USD

2nd RUNNER UP PRIZE: \$2,500.00 USD

# Call for Code Open Source Projects

Join the Call for Code Open Source community and build and deploy solutions that help fight the most pressing issues of our time. Your entire registration journey will be three simple steps.

Step 1: Create your account or log in.

Enter your email address and create a password to get free access to IBM Cloud.

Step 2: Confirm your privacy settings (new accounts only).

You're in control of what you share with IBM and receive from us.

Step 3: Finalize your registration.

Complete the remaining fields and customize your preferences, then you're done!

By registering, you agree to the IBM Developer Terms of Use.

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