


Scaling AI for Smarter, Cleaner Energy Systems

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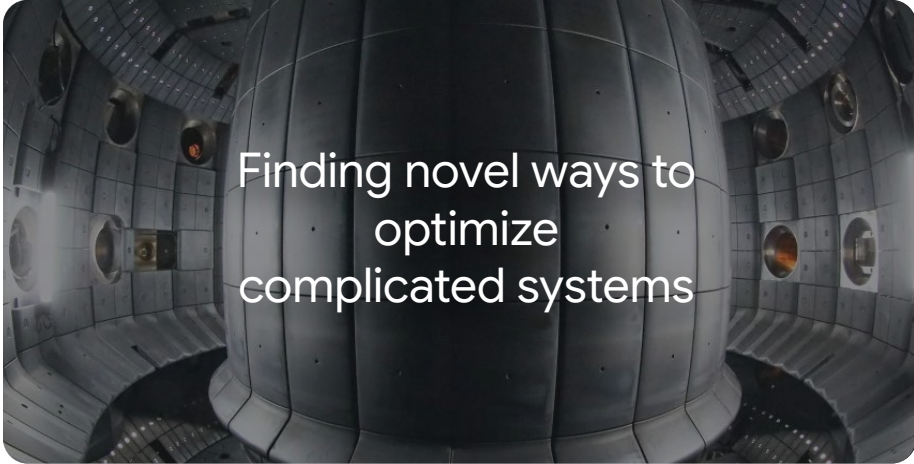
Build AI responsibly
to benefit humanity



Identify patterns in
large datasets and make
predictions



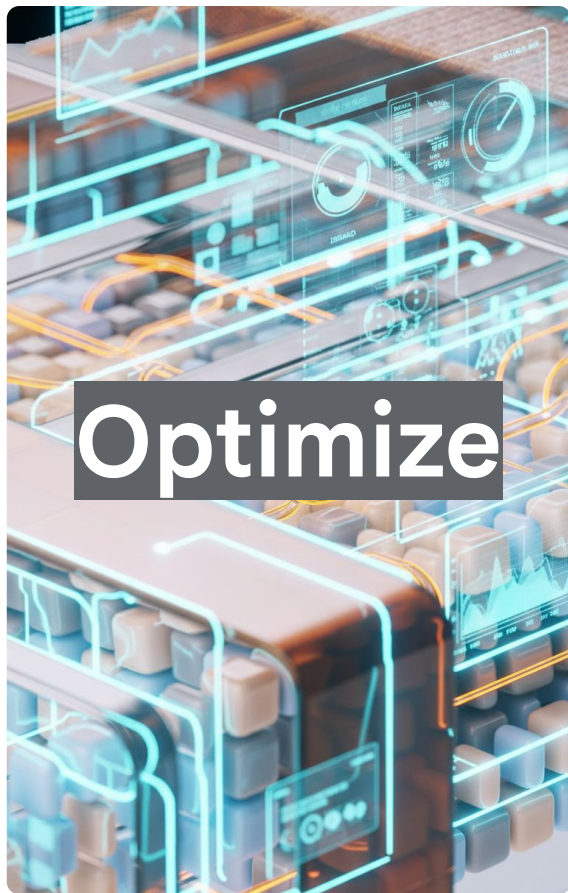
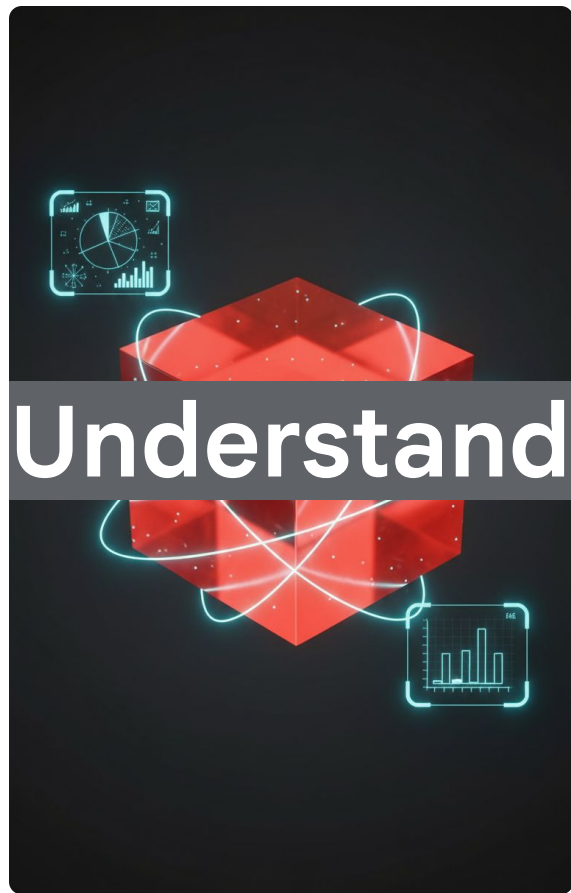
Forecast how a
complex system will
change over time



Finding novel ways to
optimize
complicated systems



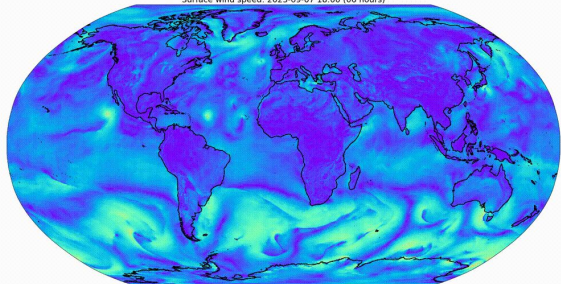
Automate key steps



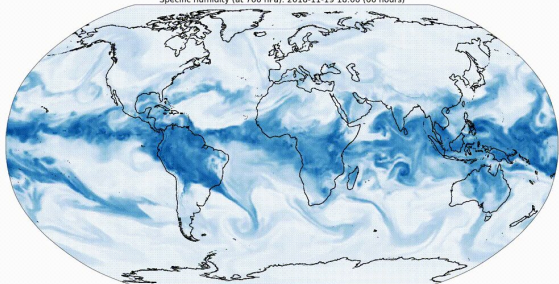
AI can help us understand the problems we face

For external use

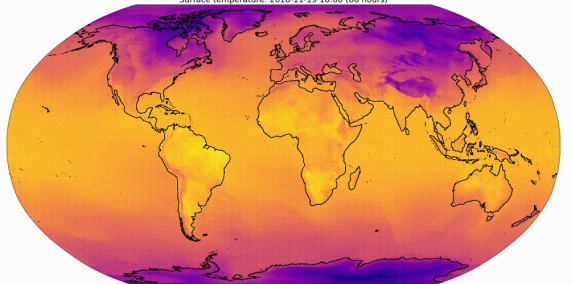
Surface wind speed: 2023-09-07 18:00 (06 hours)



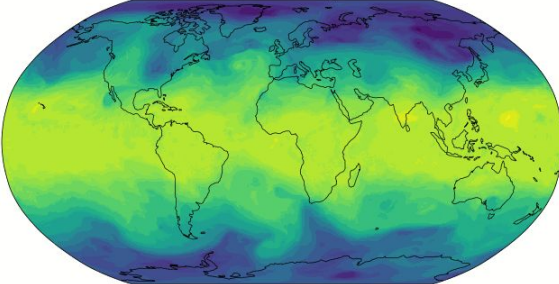
Specific humidity (at 700 hPa): 2018-11-19 18:00 (06 hours)



Surface temperature: 2018-11-19 18:00 (06 hours)



GraphCast [t500]: 2018-11-27_12:00 (0 hours)



WeatherNext predicts 80 variables at 0.25° resolution

High processing speed: Generates 10-day & 15-day global forecasts in minutes

Industry-leading accuracy: Both models outperform previous industry state-of-the-art models on >90% of target variables and lead times.

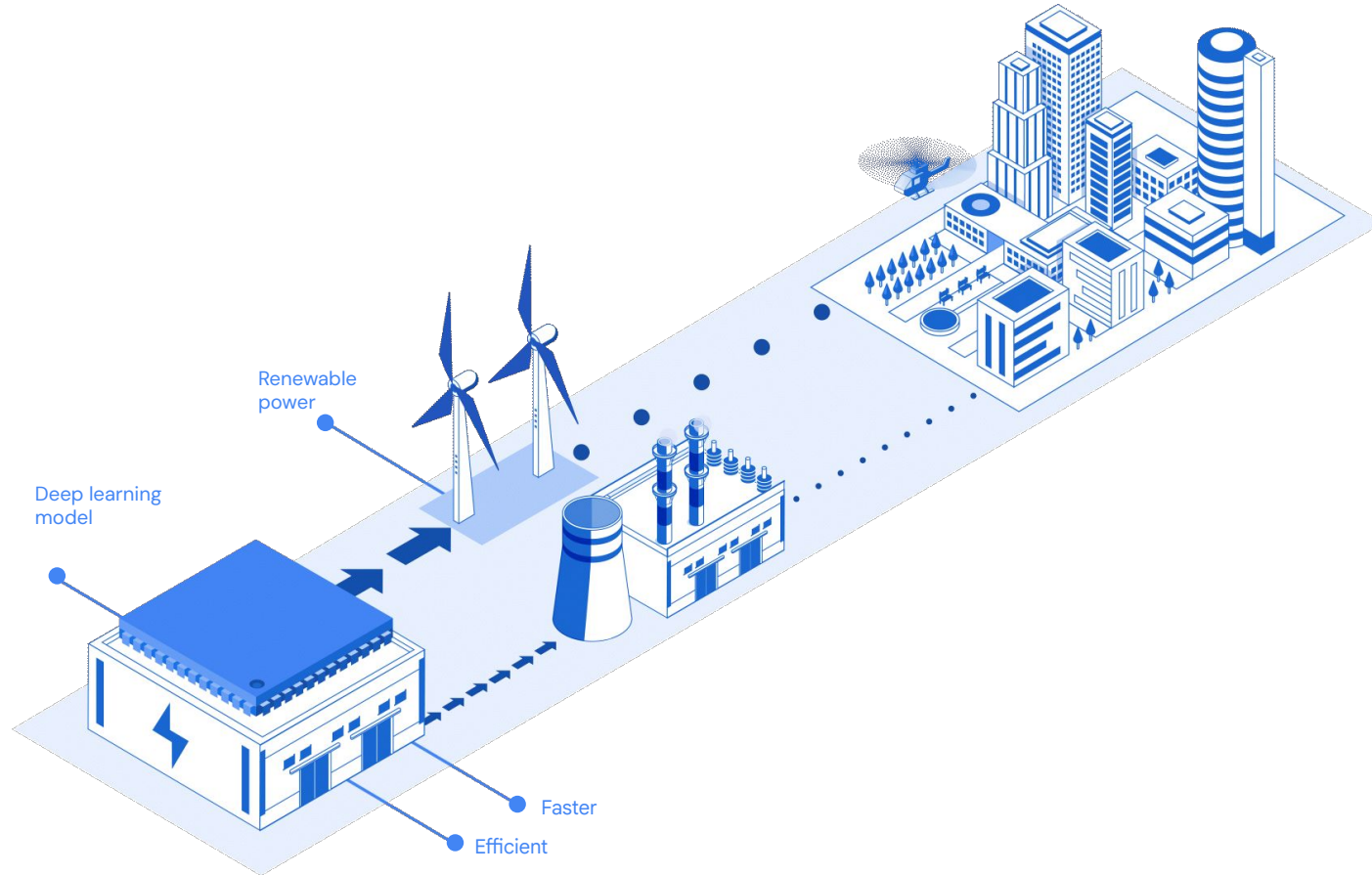
Open Climate Fix

Increased accuracy of solar supply predictions by 40%



AI can help us optimize current infrastructure

For external use





AI can help us **accelerate** breakthrough science

Plasma Control

Accelerating breakthroughs in fusion energy





Predictive Maintenance



Dynamic Line Rating



Optimizing DERs



Site Planning



Collaboration with
experts (you)

The image shows a man and a woman in a control room, standing in front of a wall of large monitors. The monitors display complex industrial diagrams, likely process flowcharts or control systems, with various colored lines (yellow, red, green) and components. The woman on the left is holding a tablet and pointing at the screens. The man on the right is pointing at a specific area on one of the monitors. The text 'Collaboration with experts (you)' is overlaid in large white letters across the center of the image.



Problem
Statements



Data



Benchmarks

1

Understand
expert problems

2

Agree problem statement,
data, benchmarks

3

Collaborate on path to
deployment & impact

1

Understand
expert problems

What are *your* critical pain points?
What are the *current* solutions in APAC?
What performance gain would *excite* you?

2

Agree problem statement,
data, benchmarks

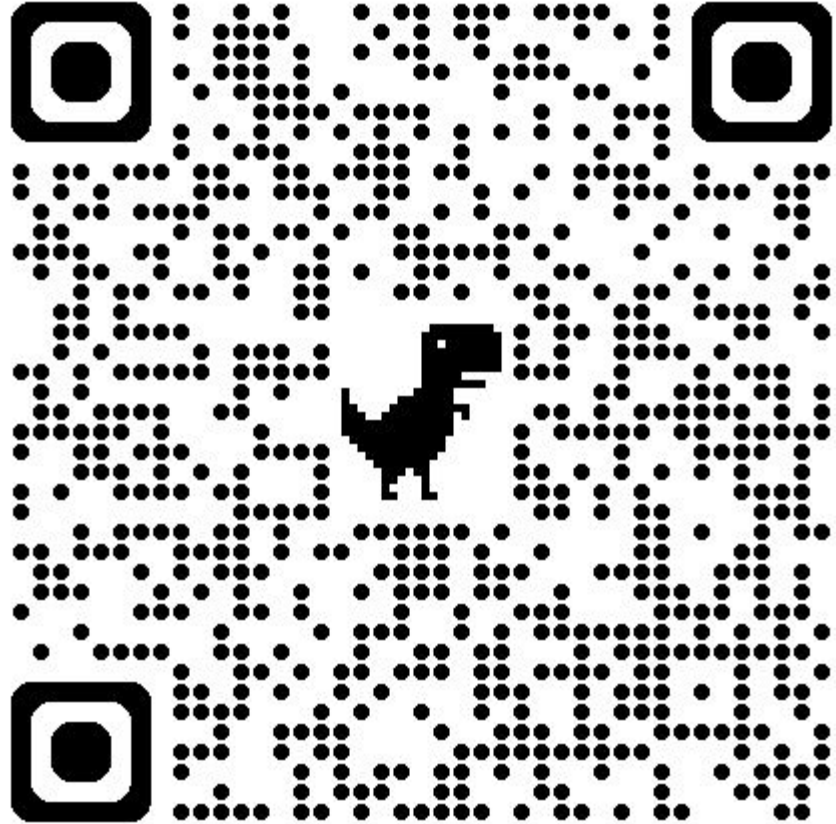
3

Collaborate on path to
deployment & impact

1

Understand expert problems

What are *your* critical pain points?
What are the *current* solutions in APAC?
What performance gain would *excite* you?



Build AI responsibly
to benefit humanity



2.2million new crystals

Imagine a universe
of possibilities

Thank you!

Accelerating fusion science
through learned plasma control

52,000
new compounds for
superconductors

25 x more
lithium
ion conductors

 Graphcast

