



7 BILLION PEOPLE
200 COUNTRIES
ALL PRODUCING DATA

Engineering Computation
& Data Science

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Rise of Systems & Data

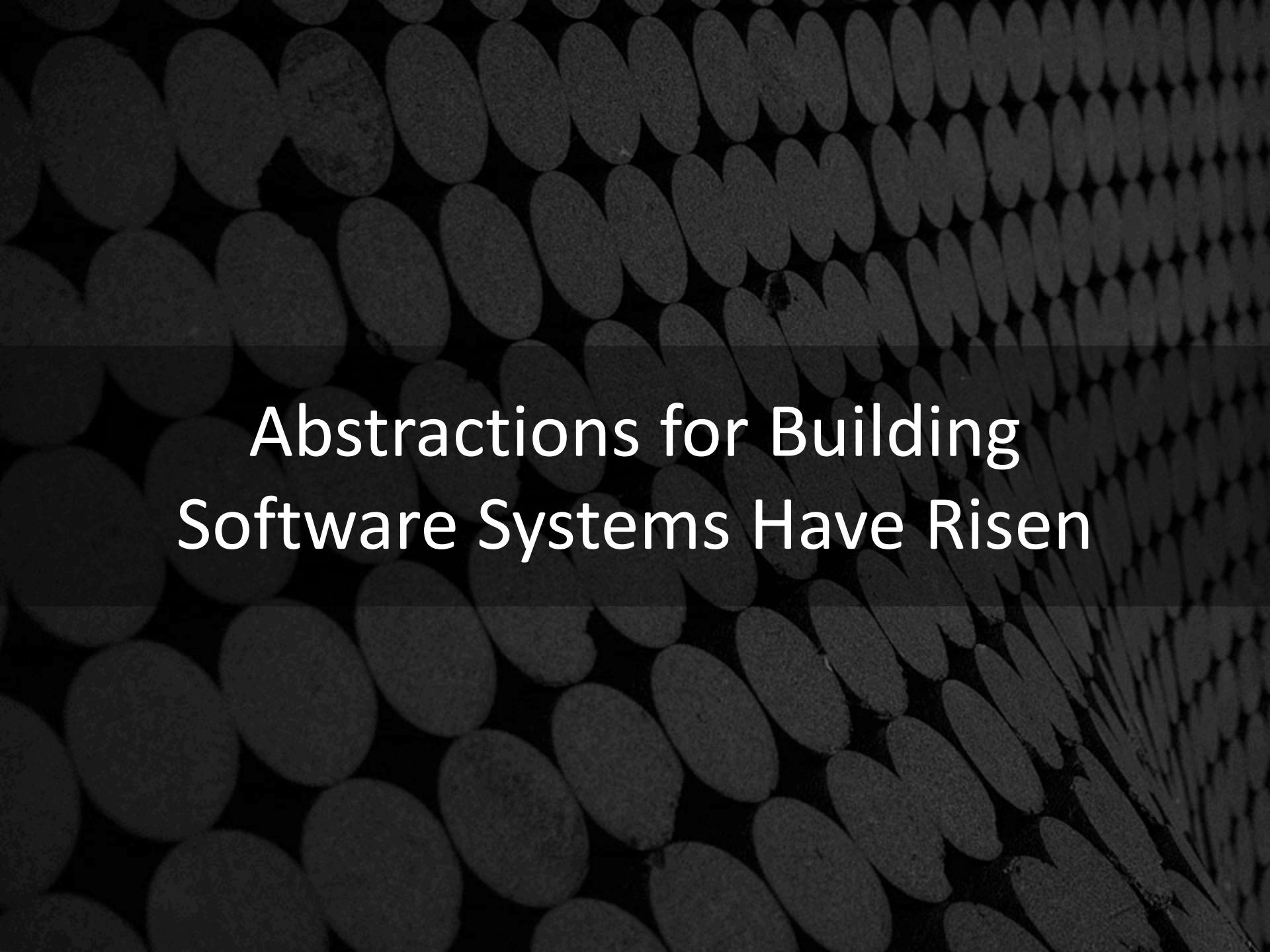
A wide-angle photograph of a massive data center. The foreground is filled with rows of server racks, their blue and white lights glowing softly. Above them, a complex network of steel beams and pipes forms a grid-like ceiling. The floor is a polished concrete surface reflecting the ambient light. In the distance, more server racks and a few bright, colorful lights are visible through a glass partition.

More Systems & More Data



Everywhere





Abstractions for Building
Software Systems Have Risen

A photograph of a climber in a white helmet and dark gear standing on a snow-covered mountain ridge. The background shows rugged, rocky mountains under a cloudy sky.

New normal: A Single Person can
Build a Complex Software System

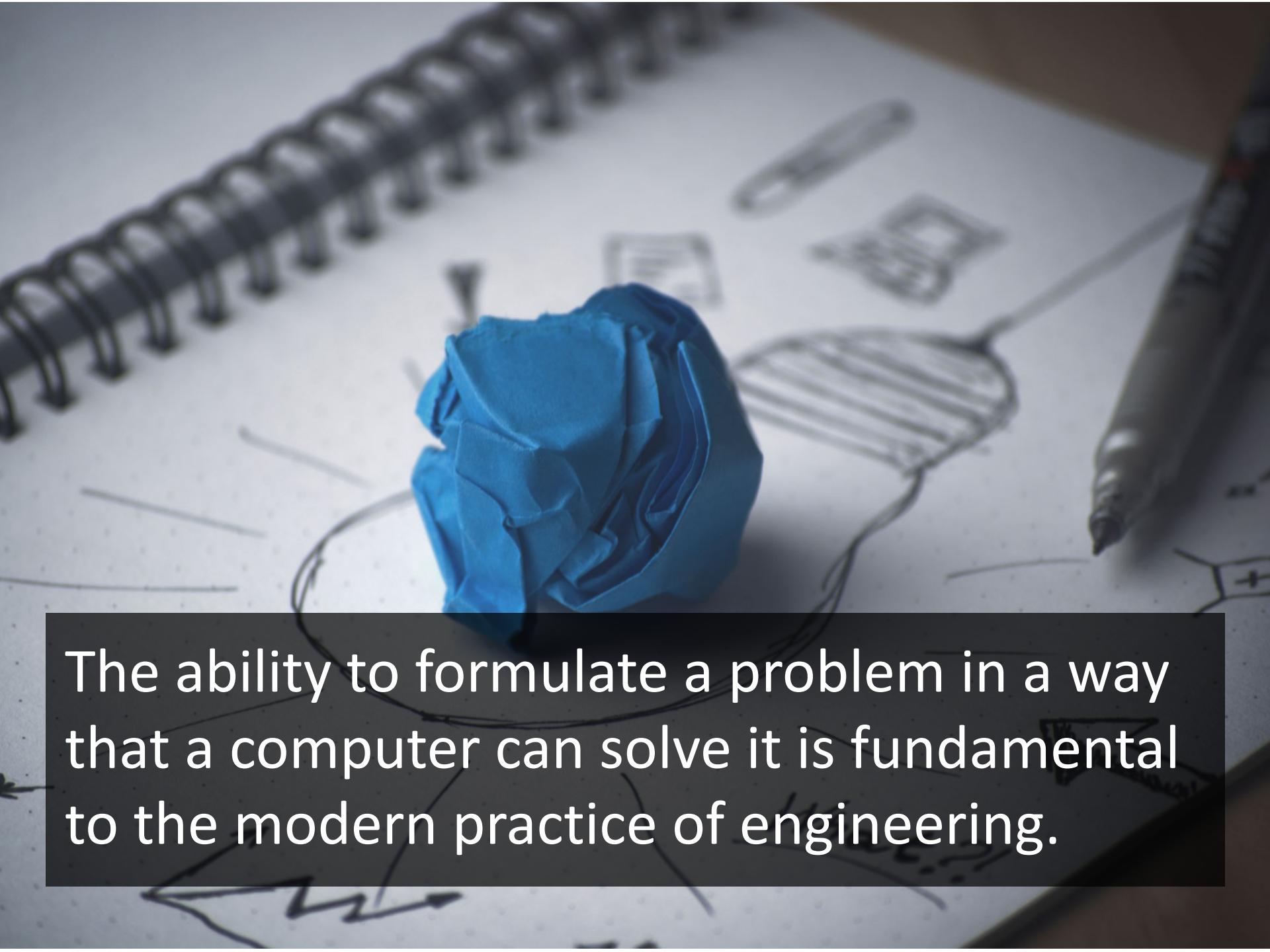


New normal: A Small Team can
Challenge an Industry

A New Challenge
for All

A photograph of a person climbing a light-colored rock face against a clear blue sky. The climber, wearing a pink tank top, black shorts, and a green helmet, is seen from behind, moving upwards. Sunlight creates a bright lens flare in the upper right corner of the image.

Challenge: develop the ability to conceptualize and represent problems in a way that a computer can solve.



The ability to formulate a problem in a way that a computer can solve it is fundamental to the modern practice of engineering.



Posing your idea in terms of computation is much more than being able to program a computer. It requires thinking in terms of systems.

Blockchain

Data
Science

IoT

Machine
Learning

NEW PILLARS

Voice

NEW PILLARS

X Reality



Security

