Inside Construction IQ: A Peek into the Mind of the AI

Keshav Potluri

Data and Software Engineer BIM



AUTODESK. UNIVERSITY



About the speaker

Keshav Potluri

- Sr. Software Engineer – Autodesk
- Masters of Information Management – University of California, Berkeley
- Tech Consultant – Deloitte Consulting

AUTODESK



About the speaker

Breanna Nery

- Software Engineer – Autodesk
- Computer Science – University of California, Los Angeles

AUTODESK.

Ucla

“There were 5 exabytes of information created between the dawn of civilization through 2003, but that much information is now created every 2 days.”

– Eric Schmidt



Photo by Sarah Pflug



Photo by shopify partners



Photo by Pixabay


Photo by Caleb Oquendo

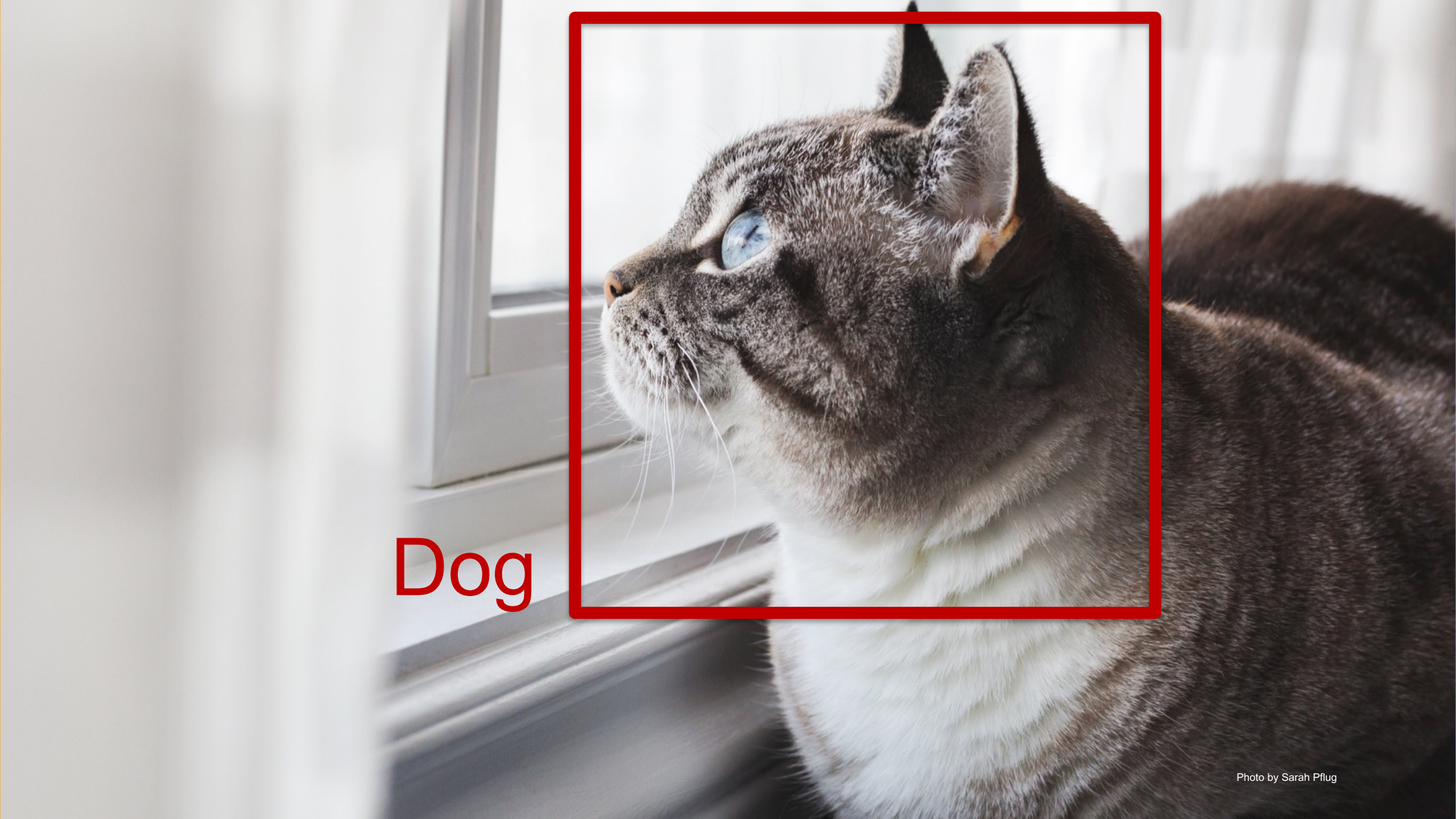
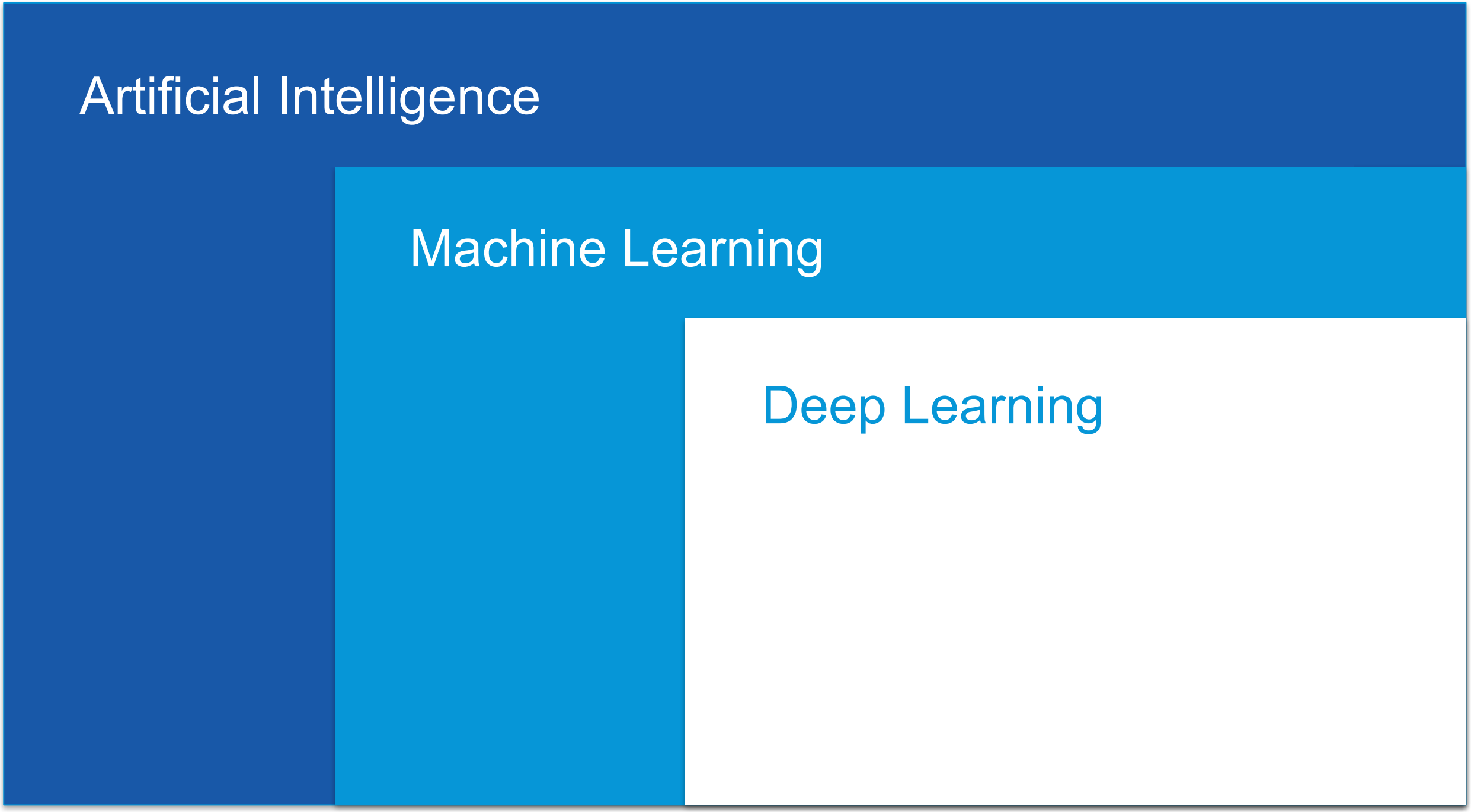


Photo by Sarah Pflug

Artificial Intelligence

Artificial Intelligence

Machine Learning


Artificial Intelligence
Machine Learning
Deep Learning

Types of Machine Learning

Supervised Learning

Unsupervised Learning

Reinforced Learning

Construction IQ Demo

How did we get here?

IDEATE

RESEARCH

- Market research to identify opportunities
- Customer validation

PLAN

RECRUITMENT

- Construction IQ pilot program
- Strict NDA and usage agreement
- Data privacy and security

BUILD

TRAINING

- Clean out the noise
- Build training datasets
- Industry experts
- Supervised and unsupervised learnings
- Iterate and improve

TEST

VALIDATE

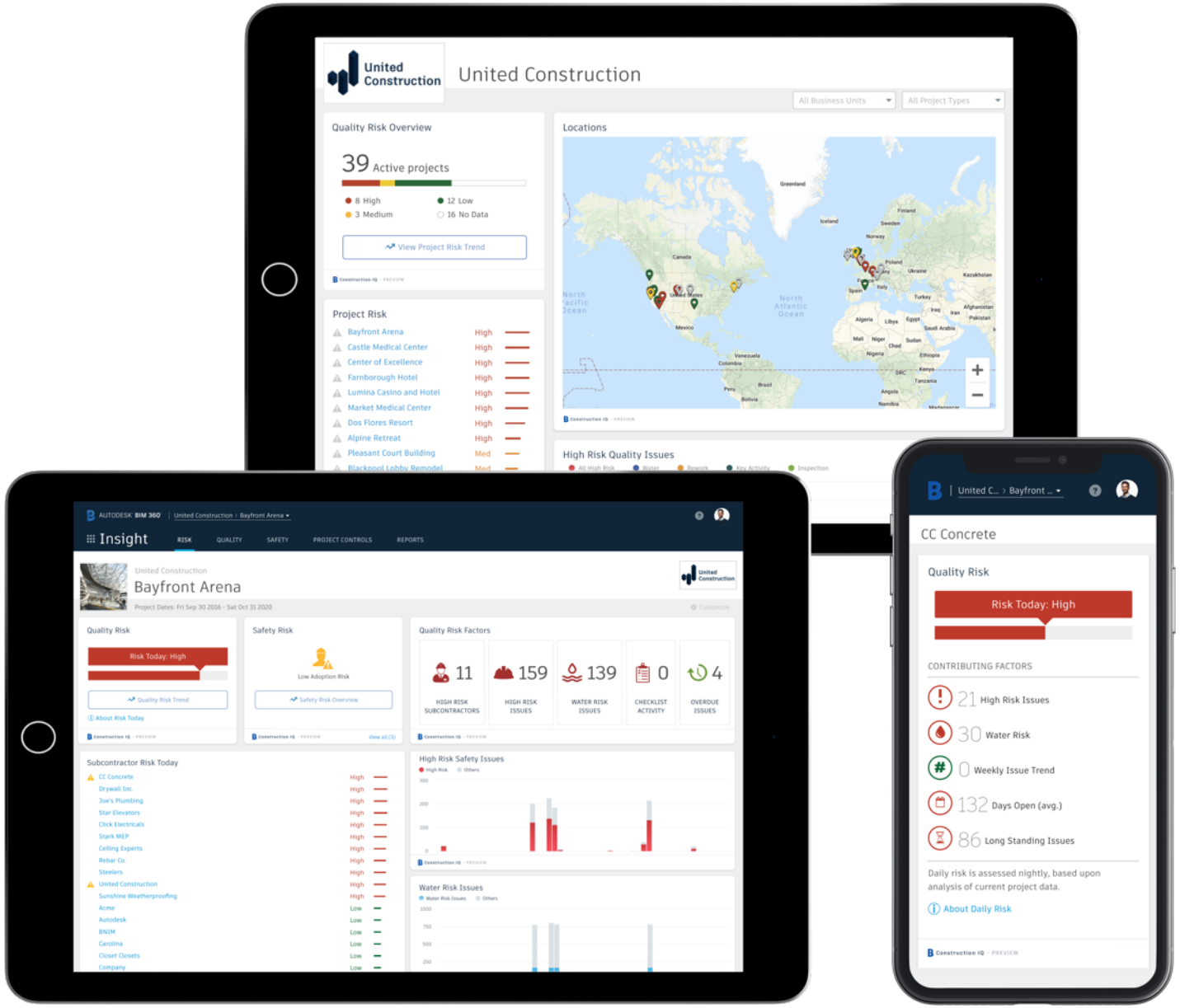
- Industry experts
- Pilot program
- Preview program
- Gather feedback

Construction IQ Feature Demo

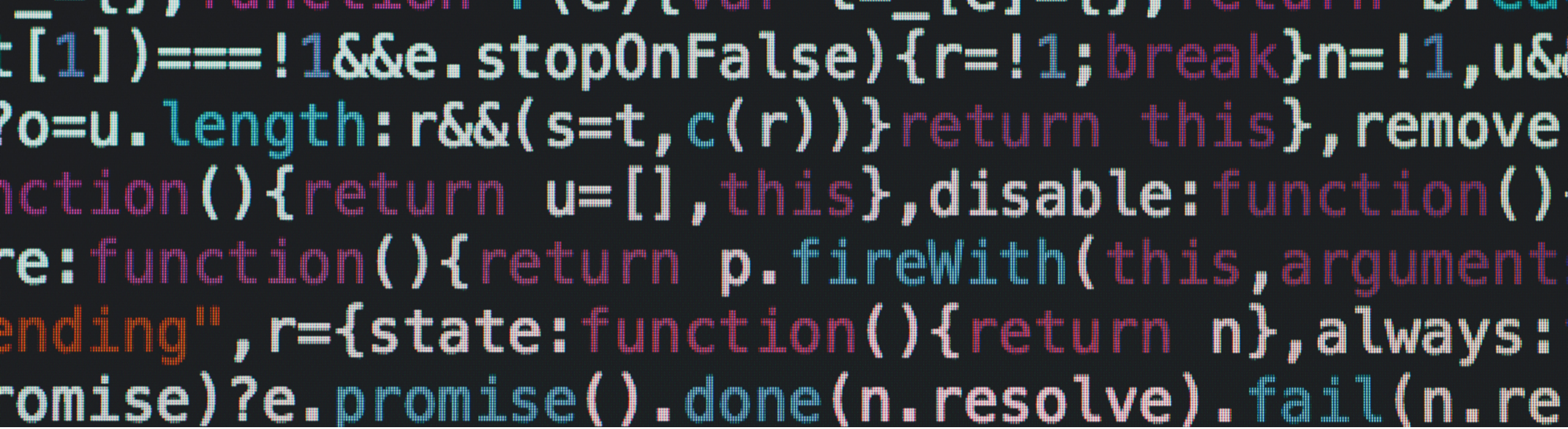
Construction IQ

Preview release

- Now available for preview to all BIM360 customers
- Activated through admin console with no additional steps
- Persona based risk assessment for Quality and Safety



”The greatest of the tools are useless if the users don’t know how to use them.”



Data Quality

- Machine learning looks for patterns in data. If you begin with bad data, you will end up with worse results.
- Garbage in, garbage out.



Data Practices

- Digitize more.
- Establish practices for capturing data regularly in a consistent manner.
- Establish standards



Feedback

- Sign up with our pilot programs
- Provide in app feedback
- Provide feedback on AKN

Construction IQ Feedback Demo



Partner Integrations

- Leverage partners from across the industry to get the most out of your data.



AUTODESK®

Make anything™

Autodesk and the Autodesk logo are registered trademarks or trademarks of Autodesk, Inc., and/or its subsidiaries and/or affiliates in the USA and/or other countries. All other brand names, product names, or trademarks belong to their respective holders. Autodesk reserves the right to alter product and services offerings, and specifications and pricing at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document.

© 2019 Autodesk. All rights reserved.