

mineral

# Mineral press kit

Discover the intelligence  
of plantkind to feed and  
protect humankind.



## Who we are

Mineral is an Alphabet company engineering perception, artificial intelligence (AI) and robotics technology to solve precision agriculture's challenges at scale. The Mineral portfolio is designed for a future where AI gives farmers the precision and automation they need to feed the world profitably and sustainably.

Beginning as a project inside of X, the moonshot factory in 2017, Mineral was inspired by agriculture's potential for greater resilience in the face of a looming climate crisis. We asked ourselves – how might domain-specific AI for agriculture help increase crop productivity and reduce waste?

In January 2023, Mineral became an independent company within Alphabet with a mission to develop AI and perception technology that helps farmers and agribusinesses more accurately predict crop yields, increase production, target pests and weeds, reduce waste, and minimize chemical use.

## What we do: AI for agriculture

Mineral's Perception AI stack enables equipment to observe, interpret, and act in diverse agricultural conditions with speed and precision.

### Observe

Enable smart equipment to extract high-fidelity information about plants under a wide variety of real-world field conditions at high speeds (~15mph)

### Interpret

Reason about the observed plant-level information, within the relevant context, and make decisions with ultra-low latency (~100ms)

### Act

Integrate with equipment to actuate autonomously based on plant image data that details crop nutrition, disease detection, weed presence and more

With these capabilities, continuous, plant-level management at scale becomes a possibility, accelerating the go to market for smart hardware and unlocking ways to efficiently build and retrain perception models for diverse agriculture applications.

To navigate the inherent complexity of nature, Mineral embraces a culture of rapid iteration and de-risking alongside immense plant data capture efforts – including cleaning, labeling, and modeling. From our lab to the fields, we're giving agribusinesses the AI assist they need to optimize critical components of the food system, such as farm equipment for row crops, the quality control process for fresh produce, and yield forecasting analysis for specialty crops.

## Our partners

In this pursuit, Mineral works with partners to apply AI and powerful perception technology to the agricultural value chain. Partners across the food production system include Driscoll's, The Alliance for Bioversity and CIAT (part of CGIAR) and Syngenta, whom we collaborate with to develop capabilities that could drive a deeper understanding of the complex interactions between plants, the environment, and farm management practices. By also enabling precise decision making and action, Mineral's AI applications in agriculture are designed to bolster the food system's resilience and adaptation to a changing climate.



## Our progress

**800,000,000+**

The number of plant images we've gathered and organized through our perception technology - ready to be absorbed by our hungry AI models.

**120+**

The number of plant characteristics - think pod counts, leaf area, flower counts, petiole length, fruit defects, diseases and more - we've modeled to better understand the plants our partners breed, grow and process.

**14**

The number of crops we've analyzed - starting with global staples like soy, corn, sugar beet and wheat - to establish the foundations to examine weed and pest pressure, soil health, germination and more.

## Mineral in the news

Click the news source to read more

### AgDaily

Mineral reimagines our food system using breakthrough AI and robotics

### Des Moines Register

If agriculture is so important, why isn't it getting the best tech?

### Farm Futures

Mineral's goal: Building tech to fix big problems in agriculture

### Agri-Pulse

Alphabet is betting on agriculture in search of a better plantkind

### Upstream Ag Insights

Mineral becomes Alphabet (Google) Company

### Bloomberg

Google's Moonshot Lab Is Now in the Strawberry-Counting Business

## Meet the Mineral team



### **Elliott Grant**, Chief Executive Officer

Dr. Elliott Grant is the Chief Executive Officer at Mineral, bringing more than 15 years of innovation in agriculture, AI, and food supply chains to Mineral's work with enterprise farms, equipment companies, growers, and data scientists worldwide. In his mission to drive a deeper understanding of plantkind and help meet the world's growing demand for food, Grant takes an inclusive approach to reimagining a more productive food system. As a serial entrepreneur, he has authored over 36 U.S. patents, and was previously the CEO of both ShopWell and HarvestMark. Grant earned his PhD in Engineering from Cambridge University.



### **Erica Bliss**, Chief Commercial Officer

Erica Bliss is the Chief Commercial Officer at Mineral, where she leads commercial development and strategy to bring more effective data and tools to agribusinesses that boost production and resiliency, improve bottom lines, and reduce waste. Prior to joining Mineral, Bliss dedicated more than a decade of her career to diversifying and de-risking food systems around the world alongside Syngenta, Walmart, Coca-Cola, Bayer, Cargill, and other multinational corporations. Bliss holds an MBA from UC Berkeley, and lives in California with her partner and daughter.



### **Will Conrad**, Head of Product

Will Conrad is Head of Product at Mineral, where he leads the development of solutions that tap into the power of AI to improve the livelihoods of farmers and mitigate the environmental impact of agriculture. Conrad brings nearly 20 years of experience in leading strategic and technical teams across both hardware and software offerings. After more than a decade of influence on precision ag product engineering at John Deere, he joined Indigo Ag to support commercial go-to-market before taking the helm of the Agriculture Solutions division at Amazon Web Services. Conrad holds a mechanical engineering degree from the University of Virginia and an MBA from Northwestern University. He grew up on a farm and currently lives with his partner and four children in Tennessee.



## Writing about AI? Let us help.

We know AI is new – and moving fast. We can help provide expertise and context as you curate stories about (click the hyperlinks for a taste of Mineral’s point of view):

- Today’s AI applications in agriculture, and why farmers and agribusiness should care
- The future of farm equipment and precision actuation
- Moving from the theoretical to the practical applications of agtech like AI to farming and agribusiness
- How AI can help improve on-farm decision making

## Mineral contact information

For media inquiries, contact Mineral at [marketing@mineral.ai](mailto:marketing@mineral.ai)

## Media resources

We want to make sure you have what you need when curating stories about Mineral, our team and our work. You can find logos [here](#) and [here](#), as well as photo imagery of our AI-powered perception technology in the field and the lab.



[linkedin.com/company/mineral-ai](https://www.linkedin.com/company/mineral-ai)



[mineral.ai/blog](https://mineral.ai/blog)

