

embedded **VISION** SUMMIT 2018

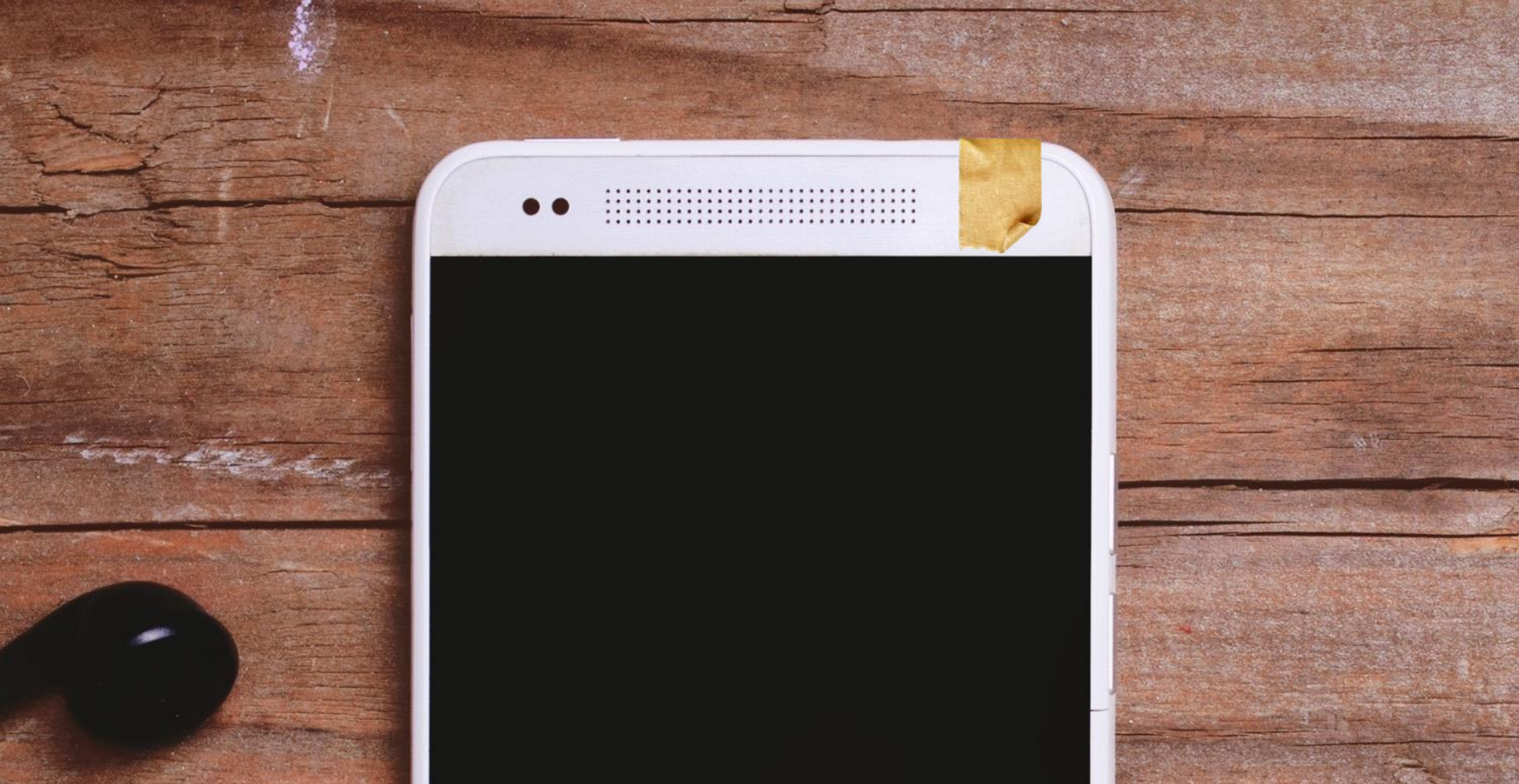
Balancing Safety, Convenience and Privacy in the Era of Ubiquitous Cameras



Charlotte Dryden
May 2018









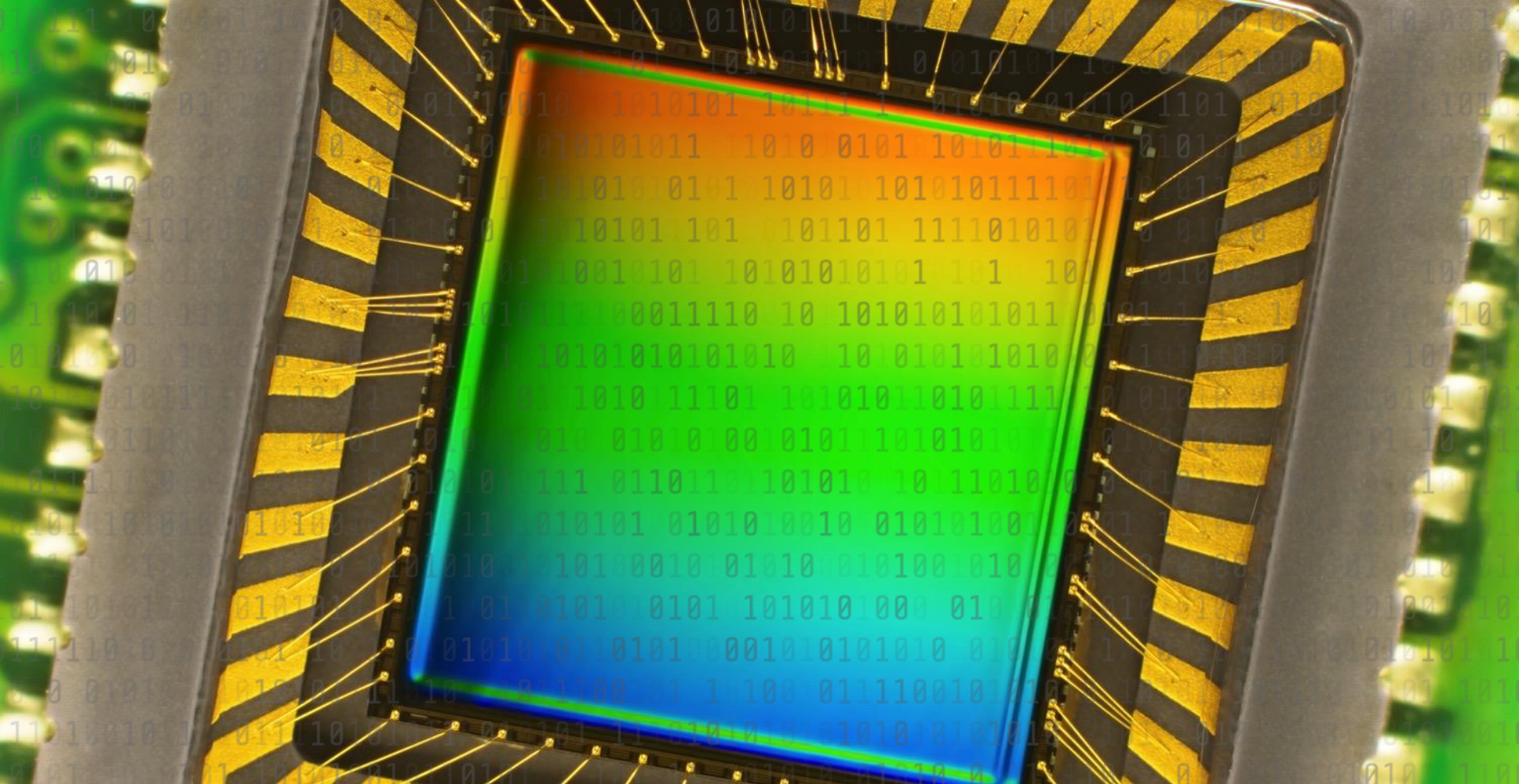






**Safety,
Security,
Convenience**

**Consumer
Privacy
Control**











CV System Design

- ✓ **Types of image sensors**
- ✓ **Image and meta data storage location**
- ✓ **Access to image data**
- ✓ **HW optimized library functions (OpenCV)**
- ✓ **Deep learning inference**
- ✓ **Custom code (sometimes open sourced)**
- ✓ **Cloud API services and features**

Edge to cloud



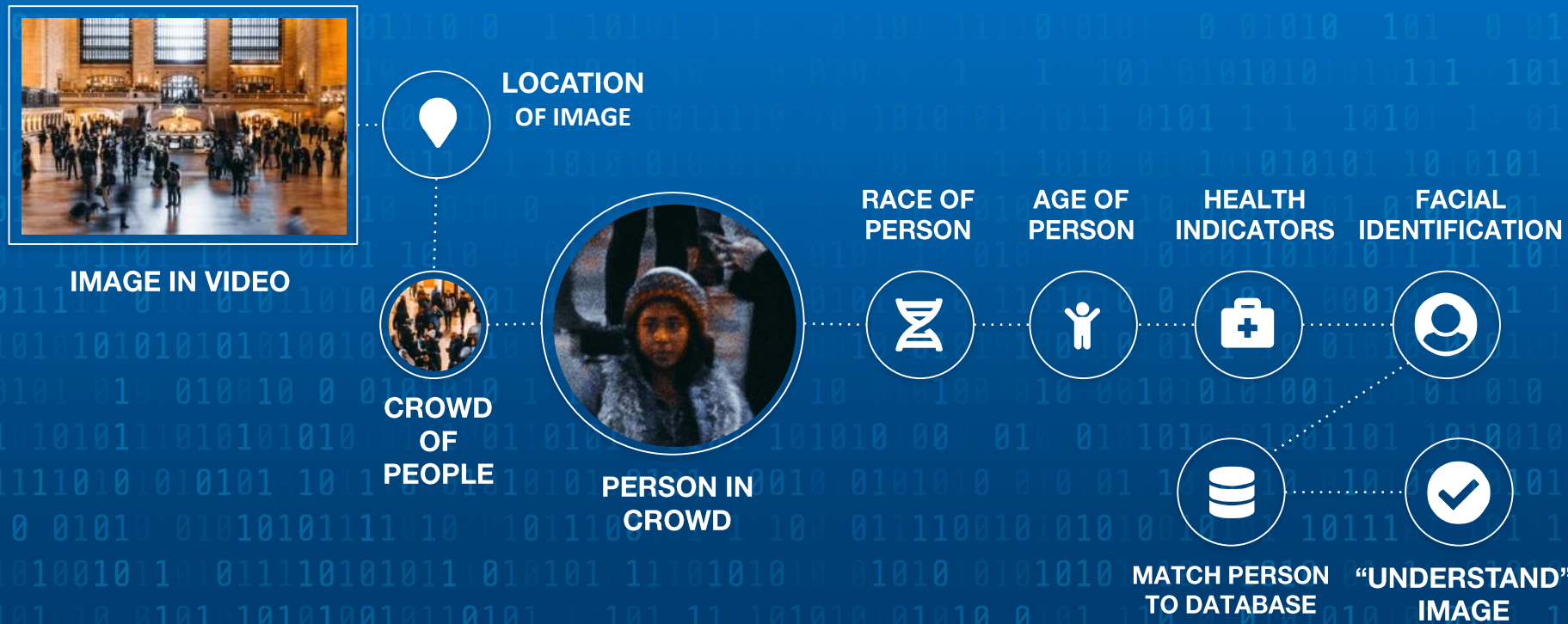
Cloud to edge

Design for Trust

How to Foster Trust

1. Explain what is happening in *plain language*.
2. Create legal accountability for proper use.
3. Expose your software interfaces (no black box).
4. Open source your code.
5. Enforce traceability with ledgers.

Algorithm Traceability





Privacy

Ubiquity



Resources

- Intel announces the OpenVINO™ (Open Visual Inference & Neural Network Optimization) toolkit. The OpenVINO™ toolkit is designed to fast-track development of high-performance computer vision and deep learning inference applications at the edge. It is the latest offering in the comprehensive Intel® Vision Products portfolio of hardware and software accelerating deep learning and transforming vision data into business insights.
- See Intel's booth for demonstrations of OpenVINO™ and other technologies from the Intel® Vision Products portfolio.
- On Thursday, May 24, attend Intel's Vision Technology Workshop: Optimized Inference at the Edge with Intel®.