

Velodyne LiDAR[®]

Driving the autonomous revolution.™

Velodyne Overview

Dubai World Conference
Self-Driving Transport



About Velodyne LiDAR

2004



"I can see all the road
some of the time, or
some of the road all
the time, I was never
gonna see all the
road all the time." -
Dave Hall



Dave Hall competes in DARPA challenge.

2004

About Velodyne LiDAR



Invented 3D LiDAR in 2005

2005

About Velodyne LiDAR

2007



Velodyne begins commercial production of 3D LiDAR

2007

Perception System Critical Mass at Your Doorstep



Velodyne Labs

Advanced Research Center
(Alameda, CA)



Velodyne LiDAR (MH)

Process Development
(Morgan Hill, CA)



Velodyne LiDAR (SJ)

Global Headquarters and 200K sq-ft Megafactory
(San Jose, CA)



Velodyne Asia

Beijing Velodyne LiDAR
(Beijing, China)



Velodyne Europe

Velodyne Europe GmbH
(Rüsselsheim, Germany)

- Almost \$0.5B Shipped, 50K Real Capacity, Global Partner Network to Scale to Millions
- 5 Facilities, >550 FT headcount for R&D, Quality Manufacturing, Automation, Supply Chain
- Global (NA, EU, China) customer service and project management team

Rapid Adoption of Real-time 3D LiDAR

Velodyne Leads Across Industries



AUTOMOTIVE



NEW MOBILITY



DELIVERY ROBOTS



COMMERCIAL VEHICLES



MAPPING



DRONE/UAV



SECURITY



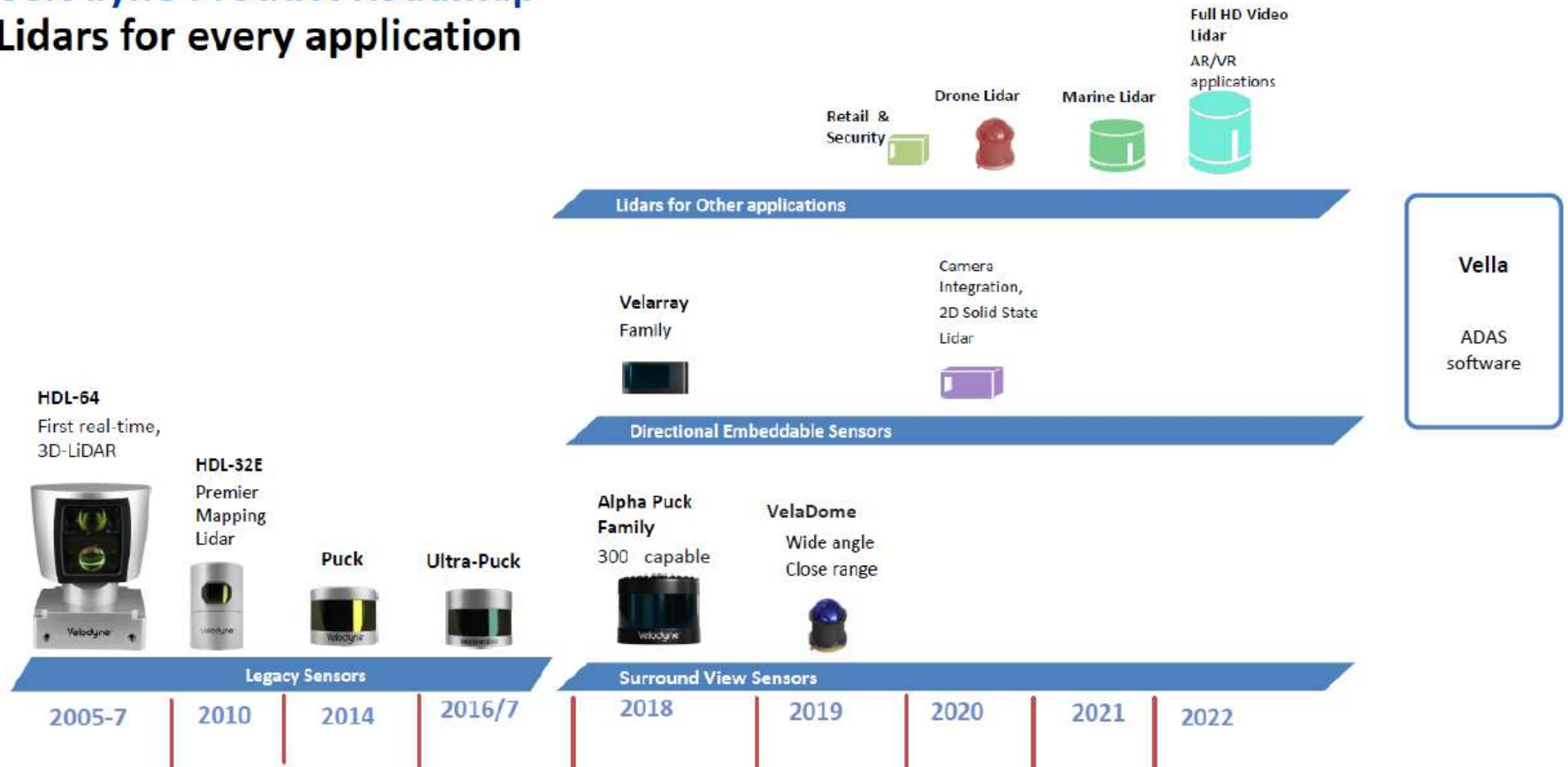
INDUSTRIAL



SMART CITY

Velodyne Product Roadmap

Velodyne Product Roadmap Lidars for every application



Velodyne Partnership with Nikon

IN THE PRESS: Velodyne Partners for Mass Production



[Nikon makes investment in Velodyne Lidar; Two to collaborate in technology development and manufacturing](#)
22 December 2018

"Velodyne Lidar, Inc. [announced](#) Nikon Corporation (Nikon) as a new strategic investor with an investment of \$25 million. **The parties further announced they have begun discussions for a multifaceted business alliance.** Nikon is one of the world's leading suppliers of products and solutions based on advanced opto-electronics and precision technologies.

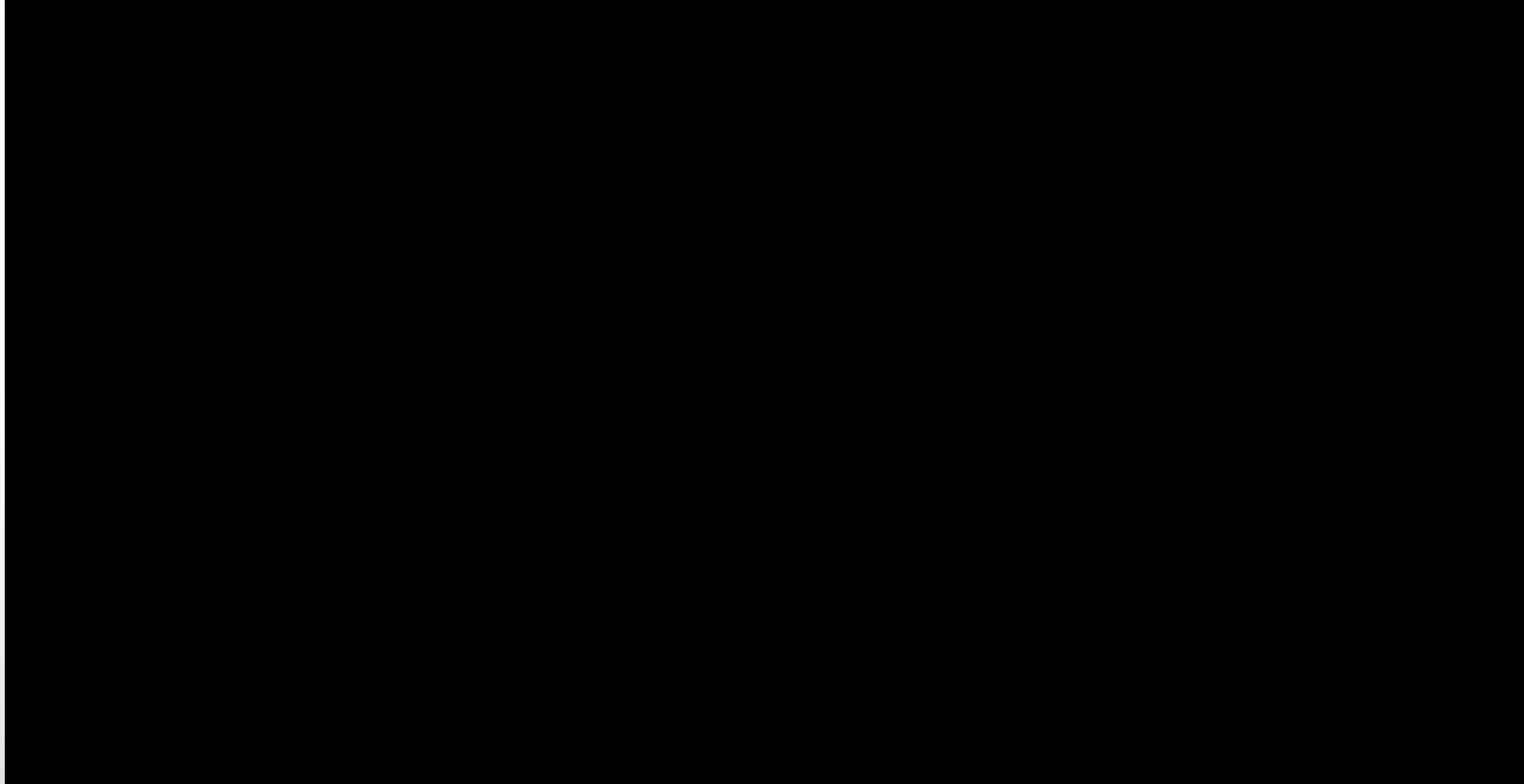
Aiming to combine Nikon's optical and precision technologies with Velodyne's sensor technology...will advance the timeline for manufacturing and mass production of lidar for the autonomous and advanced safety global market. The companies share a futuristic vision of advanced perception technology for a wide range of applications including robotics, mapping, security, shuttles, drones, and safety on roadways..."

2D versus 3D

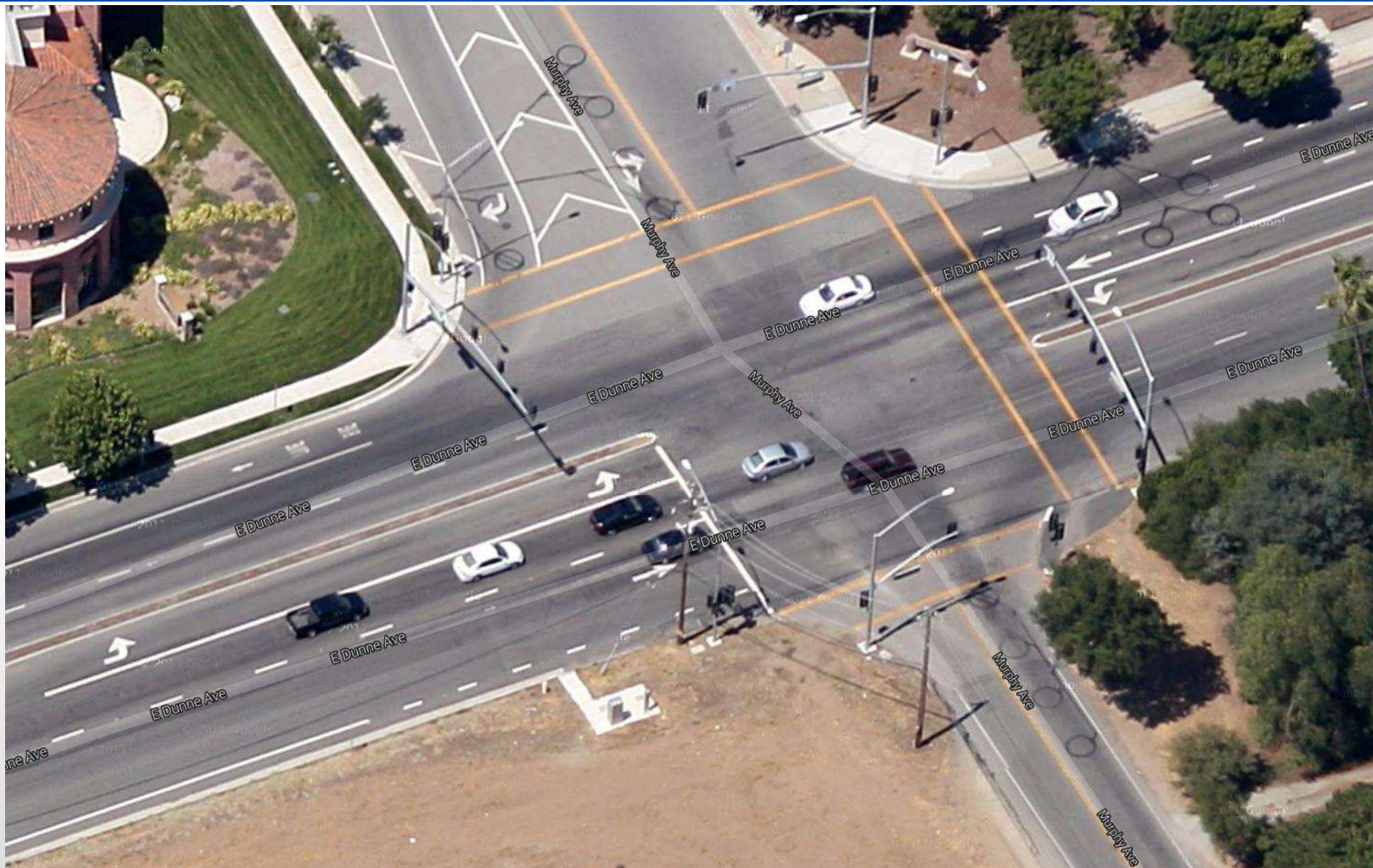
Onwards to Autonomous Navigation

**3D real time,
multi-channel lidar**

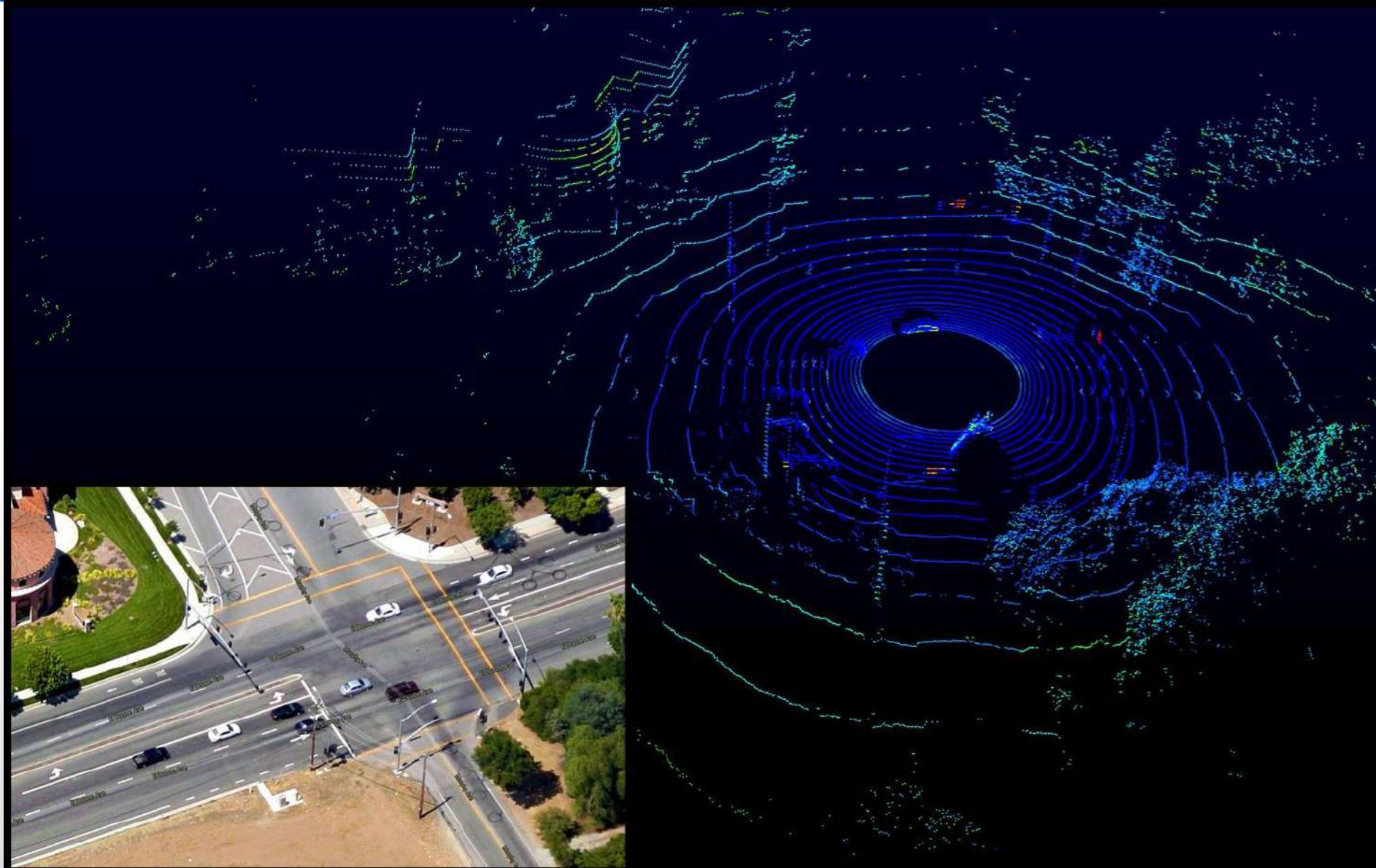
Depicting a Scenery With 3D LiDAR



Principles of understanding multibeam lidar approach



Principles of understanding multibeam lidar approach



Principles of understanding multibeam lidar approach



ntersection.pcap Frame: 84

Velodyne



Tacticaware accur8vision Smart Intersection

ARM ALL

ALL DISARMED

- LIDAR SNP.
- LIDARS ON
- ARCHIVE
- SETTINGS
- LOGIN
- LAYOUT
- POWER



NO CAMERA ASSIGNED

NO CAMERA ASSIGNED

Thank You !

