





# The AV Startup Ecosystem

**Paula A. Bejarano**

The Business of AVs: An Intensive Bootcamp (11/10/19)

Stanford Continuing Studies

# About Me



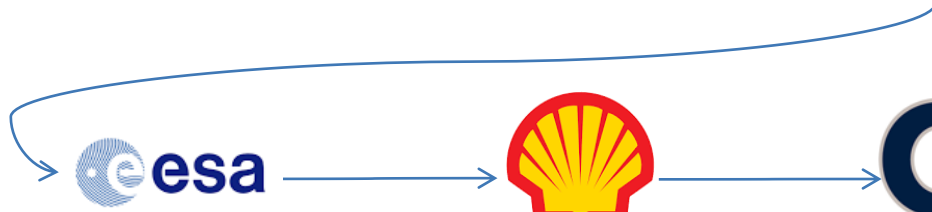
BSc Aerospace Eng



Kennedy Space Center



MSc Mechanical Eng



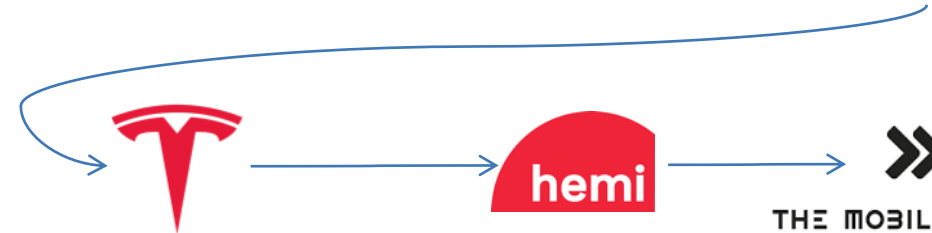
Satellite Systems Engineer



Offshore The Netherlands



MBA



Manufacturing Ops



AV Investments



THE MOBILITY HOUSE

Operations Mgr

AUTONOMOUSITY

AUTO NOMOUSITY



PAULA A. BEJARANO

PAULA A. BEJARANO

AUTONOMOUS VEHICLES &  
EMERGING BUSINESS MODELS



\$15,000,000,000

Acquisition price for MobilEye paid by Intel in 2017



# Self-Driving Use Cases

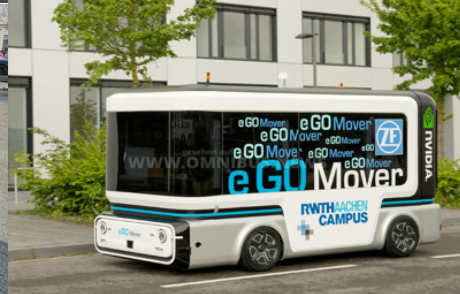
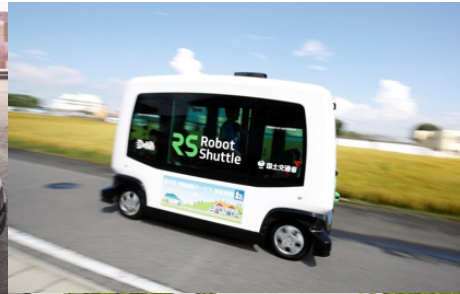
## Delivery



## Robo-Taxi



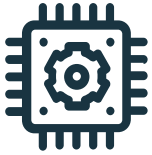
## Shuttles



## Trucking



# Partnership Landscape



## TECHNOLOGY STACK



## OEM INTEGRATION



## FOOD DELIVERY



## RETAIL



## LOGISTICS



## RIDESHARING



# Industry Consolidation

HARDWARE/MOBILITY

SELF-DRIVING SOFTWARE

INTEGRATORS



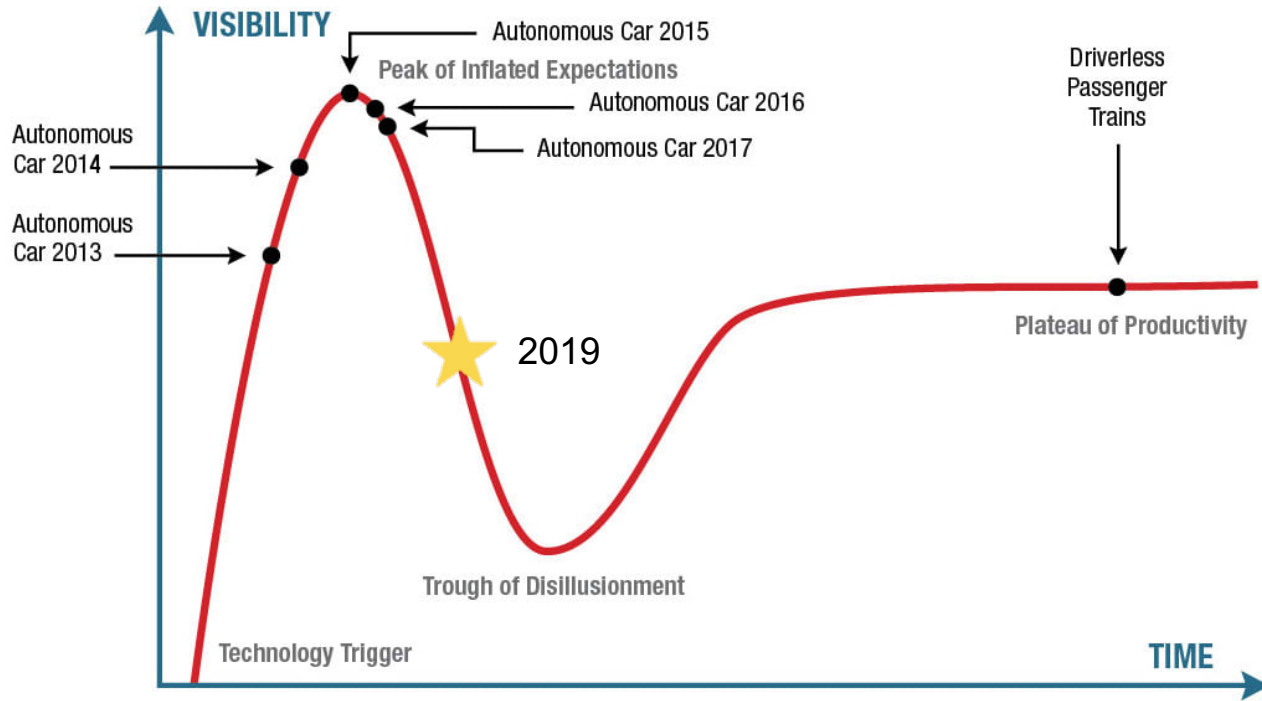


Autonomous Vehicles Fall into The Trough of  
Disillusionment...But that's Good”

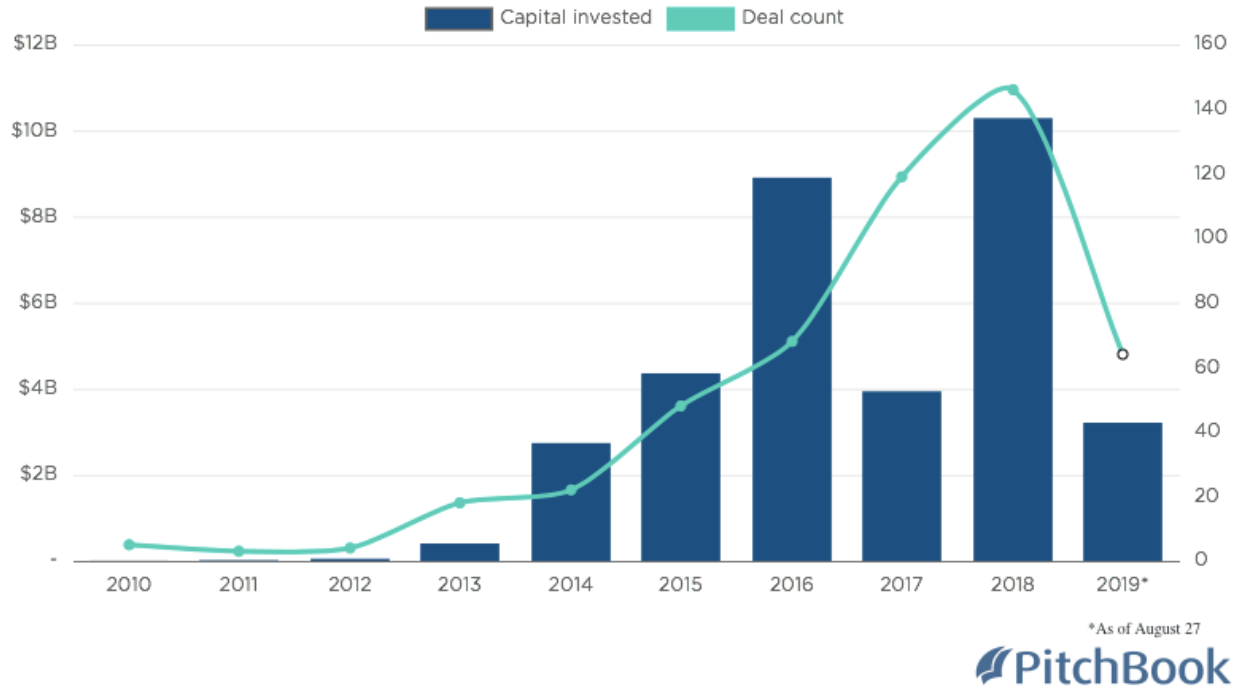
—Mike Ramsey, Forbes 2018



# Gartner's Hype Cycle Applied to AVs



# 2019 Saw Less Deals in the AV Space



## **Low-Cost LiDAR Startup Oryx Vision Shuts Down**

Uber Shuts Down Otto Autonomous Truck Division

## **Cruise, GM's Driverless-Car Unit, Delays Robot-Taxi Service**

Cruise CEO says company needs to log more test miles before launching service, declines to offer new timeline

Bloomberg

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## **How a Billion-Dollar Autonomous Vehicle Startup Lost Its Way**

Troubles at lidar company Quanergy point to difficulties in a highly-hyped industry.

Chinese startup WeRide joins auto giants in delaying plans for fully autonomous operations

## **Apple Said To Have Bought Assets Of Struggling Drive.ai**

**Uber self-driving car strikes and  
kills pedestrian while in  
autonomous mode**

**Navya suspends autonomous bus  
trials in Vienna after collision**

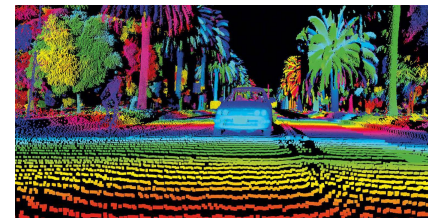
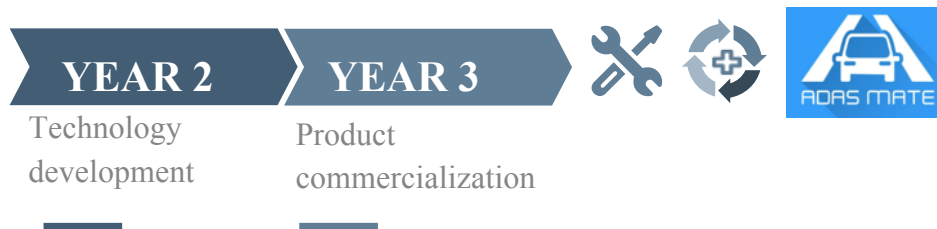
# Startup Product Roadmap

PRIMARY  
OFFERING



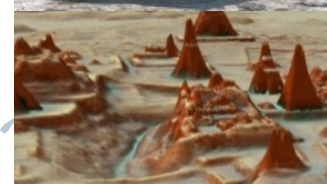
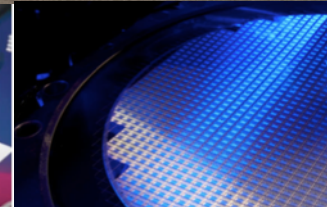
**YEAR 1**

Early VC round  
Team formation



SECONDARY  
OFFERING





## Case Study: Ouster

- Spinning Lidar
- Founded in 2016; raised \$90m
- Low cost, silicon CMOS tech
- Shipping product across verticals
- Sales-focused
- Over 10 distributors worldwide

Aggressive commercialization strategy



## Case Study: MightyAI

- Training data for perception systems
- Founded in 2014; raised \$30m
- Initially Spare5 crowdsourcing app
- Acquired by Uber ATG in 2019

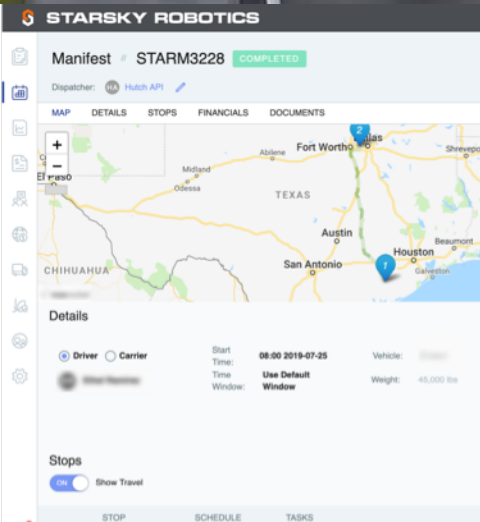


Gig economy delivering value faster,  
cheaper to AV customers



## Case Study: Starsky Robotics

- Autonomous trucking
- Founded in 2016; raised \$20M
- Exit-to-exit AV; last/first mile teleops
- Building operations hub in TX



End-to-end freight service

# SELF DRIVING CARS 101

## Innovators In Autonomous Mobility Company Showcase

Monday, November 18<sup>th</sup> @ 6:30 PM  
UC Berkeley Extension Campus (160 Spear St. in SF)



Venue:  UC Berkeley Extension



**Brent Shedd**  
SF Region Leader  
Self Driving Cars 101



**Gary Thompson**  
COO  
GUSS Automation



**Tim Wong**  
Technical Mktg for AVs  
NVIDIA



**Helena Merk**  
Software Engineer  
Smartcar



**Dinesh C**  
Founder & CEO  
ADAPT

Join us to hear from some of the most innovative companies in the AV space today as they share what they're building and how it will impact our autonomous future while enjoying refreshing beverages, tasty food and the company of other autonomous mobility enthusiasts.

Register at <https://bit.ly/36rbFzw>





# Thank you!

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“Autonomously: Autonomous Vehicles &  
Emerging Business Models”

