



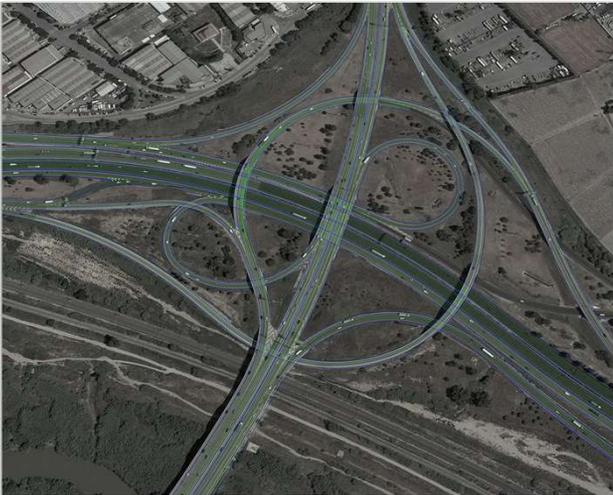
DRIVE MAPPING ECOSYSTEM (1)

Justyna Zander, *PhD*

March 20, 2019

NVIDIA DRIVE MAPPING

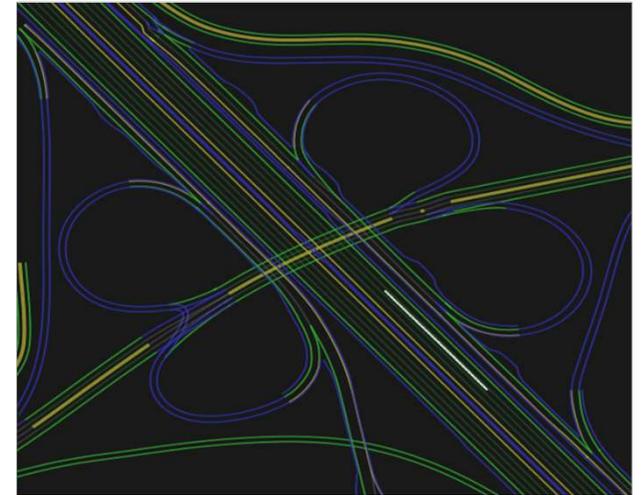
Localize Globally, Update HD Maps, and Create MyRoute



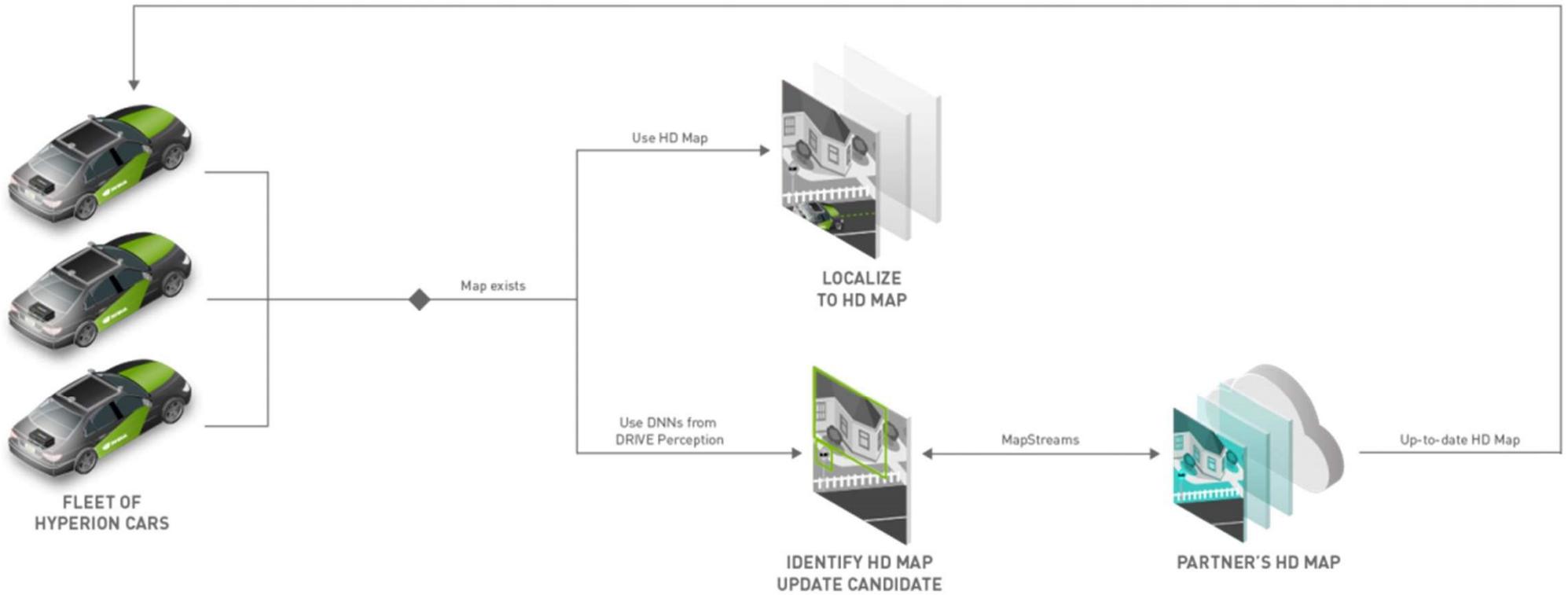
Map Localization
Using DRIVE Localization API



Map Update
Using DRIVE MapStream API



Map Creation
Using DRIVE MapStream/MapServices API



DRIVE LOCALIZATION

Localizing to HD Maps Worldwide

Performance | Efficiency | Robustness | Accuracy

Mass Market Solution | Cost Effective Sensors

Scalable | Global Ecosystem Partners

Open | Available to Any Mapping Company



DELIVERING A GLOBAL LOCALIZATION SOLUTION

Partnering with the world's Leading Mapping Companies



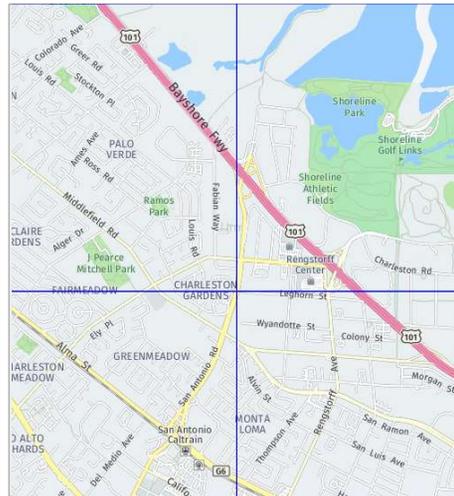
USA | Europe | Japan
China | Taiwan | other countries

LOCALIZATION STEPS

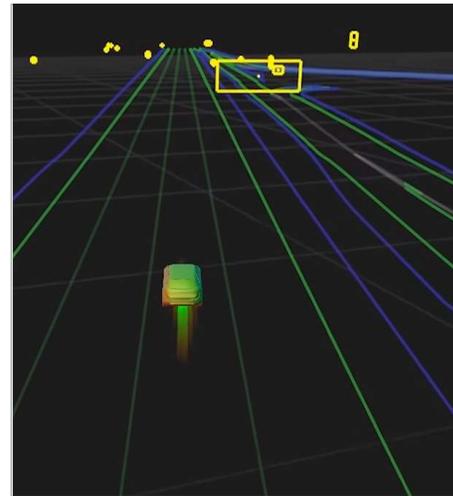
HERE example



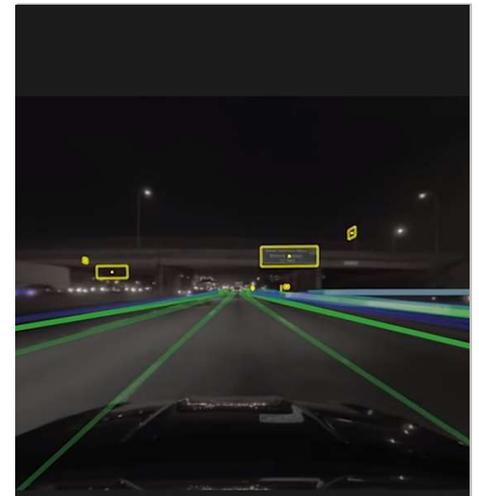
Detect
MapNet



Project
HERE HD Live Map



Match
DLA and CUDA



Drive
DRIVE Software



DRIVE MAPPING ECOSYSTEM (2)

Justyna Zander, *PhD*

March 20, 2019

DRIVE MAPSTREAM

Keeping HD Map Up To Date

Enables Constant Map Update and Delivery

Available API | Open | Scalable

Supported by Major Mapping Companies

Crowdsourced from OEM Cars

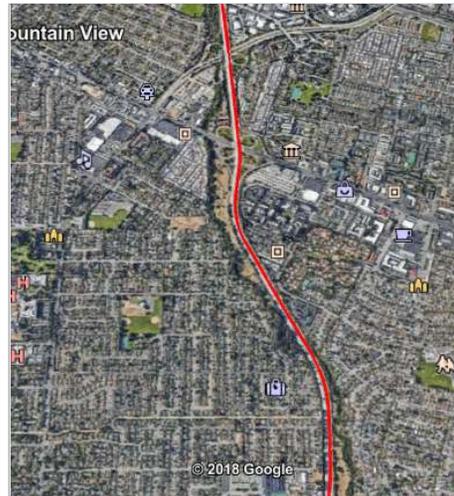


MAP UPDATE STEPS

TomTom example on I-85 in CA



Detect
MapNet



Create MapStreams
Map update primitives



Convert
MapStreams to Roadagrams



Update Map
HD map in the Cloud

DRIVE MAPPING - END PRODUCTS

Localization

DRIVE Localization
to localize
to any HD map globally

Map Update

DRIVE MapStream
in the cloud to enable
partner's HD map update

MyRoute

DRIVE MapServices in the
cloud to build *MyRoute*
where no map exists yet

DRIVE MAPPING ARCHITECTURE

