TRI-AD Introduction

2nd NDS Public Conference
Online on September 24, 2020

Naoya Kuwata
Lead of Product Strategy (Mapping)
Toyota Research Institute - Advanced Development, Inc.

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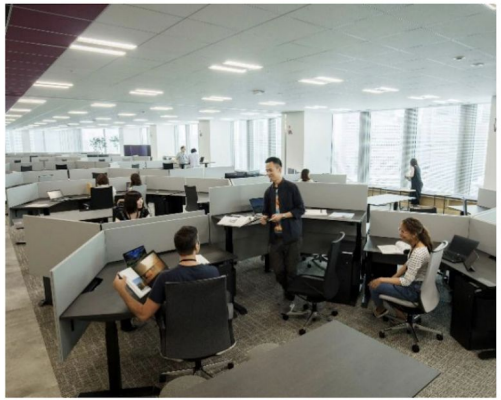
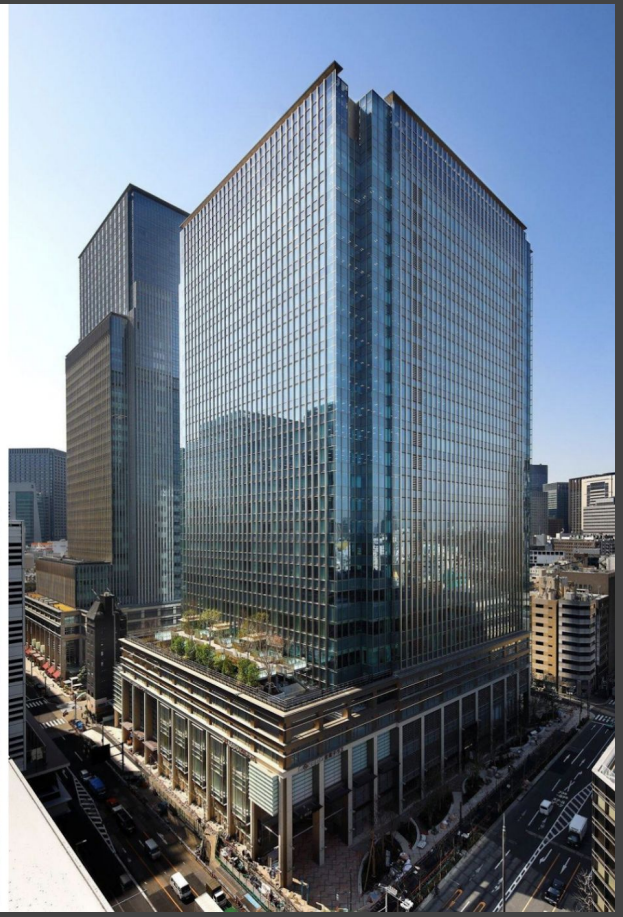
TRI-AD

Toyota Research Institute
Advanced Development, Inc.

- Company established March 2018
- Software for Automated Driving / Advanced Safety
- Joint venture of Toyota, Aisin, and Denso





For details, please visit us;
https://www.tri-ad.global/about/index

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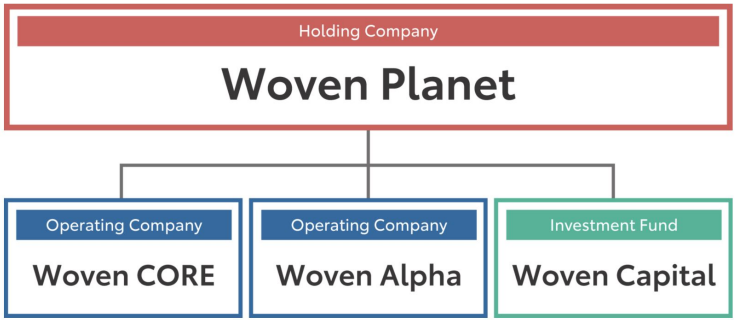
JULY 28, 2020

Toyota Research Institute – Advanced Development, Inc. announces it will expand and improve its operations by forming Woven Planet Holdings and two new operating companies, Woven CORE and Woven Alpha

Woven Planet Holdings group



For details, please visit us;
https://www.tri-ad.global/news/20200728
https://toyotatimes.jp/en/insidetoyota/088.html

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Automated Mapping Platform (AMP)

AMP open software platform:

- Provides developers easy, open and sustainable access to High Definition (HD) maps from across industries and fleets.
- Deployed applications contribute anonymized sensor data to the platform

AMP Advantages:

- Provides both accuracy and scale
- Allow any developer to automatically generate HD map data
- Leverage cloud-based map technology and code deployment.
- Easy-to-use Application Programming Interfaces (APIs) for HD maps.
- Leverage satellite imagery and Toyota's enormous fleet of vehicles to continuously update the map in near real-time.

For details, please visit us;
https://www.tri-ad.global/areas-of-focus/automated-mapping-platform

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Automated Mapping Platform (AMP) Overview

Embedded Camera

Dashcam

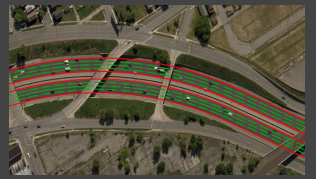
Probe/
Road Object
Data

Satellite Imagery

Navigation Map

Base
Map
Data

AMP



Maps

Automated
Driving
Map
Users

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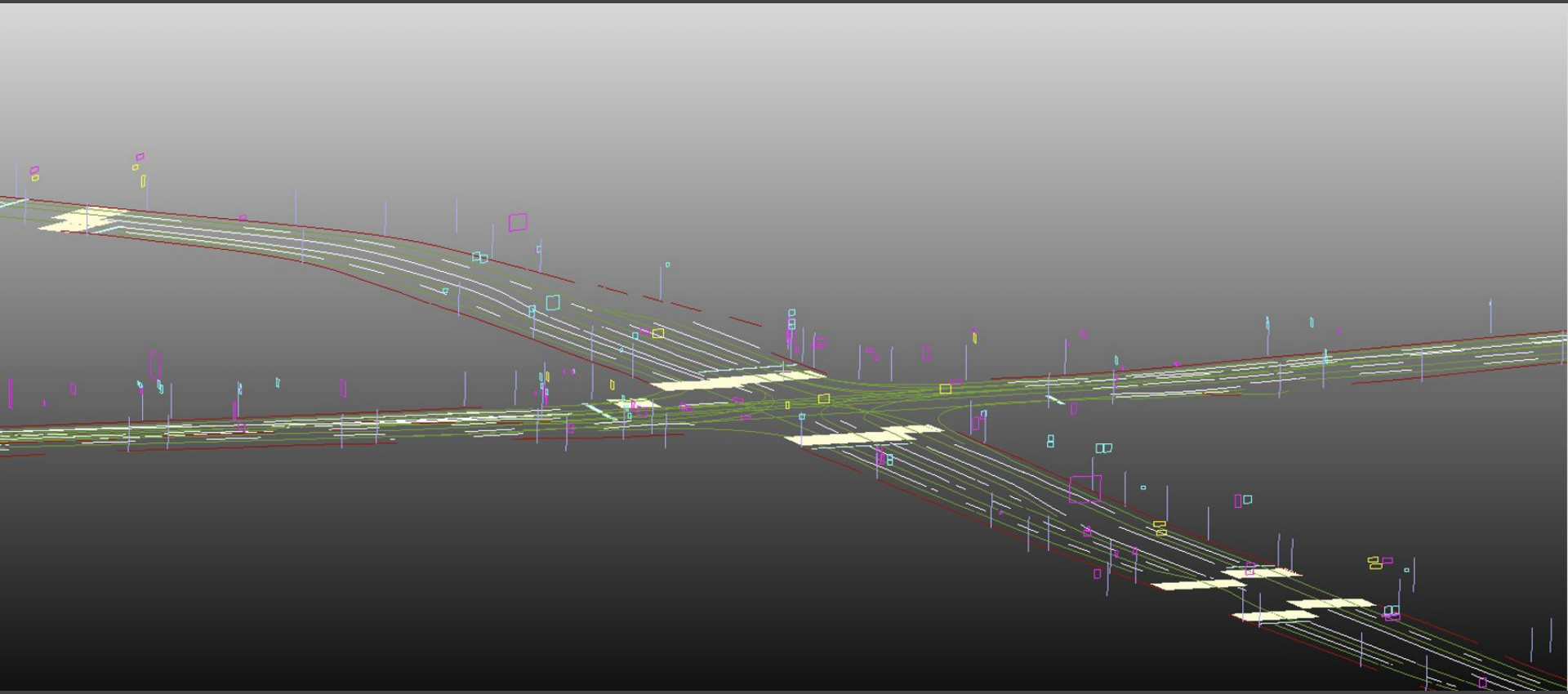
AMP Map Image (Example)



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AMP Key Differentiator #1:
Automated Driving Maps using Imperfect Crowdsourced Data

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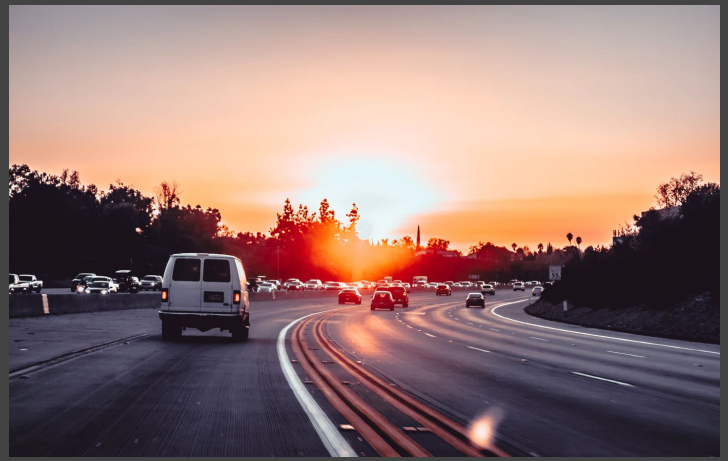
AMP Key Differentiator #2: Highways and Surface Roads



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AMP Development In Progress

Mar 17, 2020

TRI-AD and DMP kick off HD Map update PoC from April 2020

On March 17th, 2020, Toyota Research Institute - Advanced Development, Inc. (TRI-AD) and Dynamic Map Platform Co., Ltd. (DMP) have agreed to a partnership to build a proof of concept (PoC) applying the technologies of both companies starting April 2020.

Read More

Mar 10, 2020

TRI-AD enables successful creation of HD maps for automated driving on surfa...

Toyota Research Institute-Advanced Development, Inc. (TRI-AD) has successfully completed proof of concepts (PoC) demonstrating high definition (HD) map building for surface roads with relative accuracy of less than 50 centimeters.

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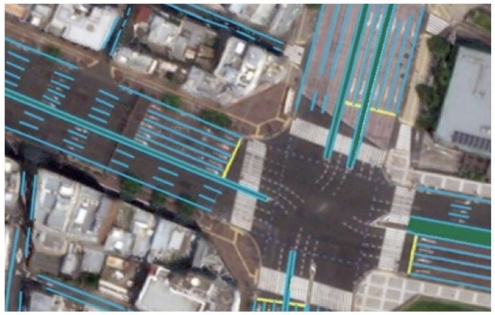
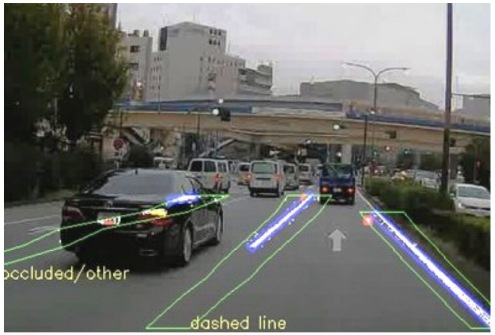


April 25, 2019

TRI-AD, Maxar Technologies and NTT DATA collaborate to build high-definition maps for autonomous vehicles from space

Read more



February 28, 2019

TRI-AD and CARMERA team up to build high definition maps for automated vehicles using camera data

Read more

For details, please click ‘Read More’

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AMP needs Partnership Expansion

For details, please contact naoya.kuwata@tri-ad.global

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Thank you

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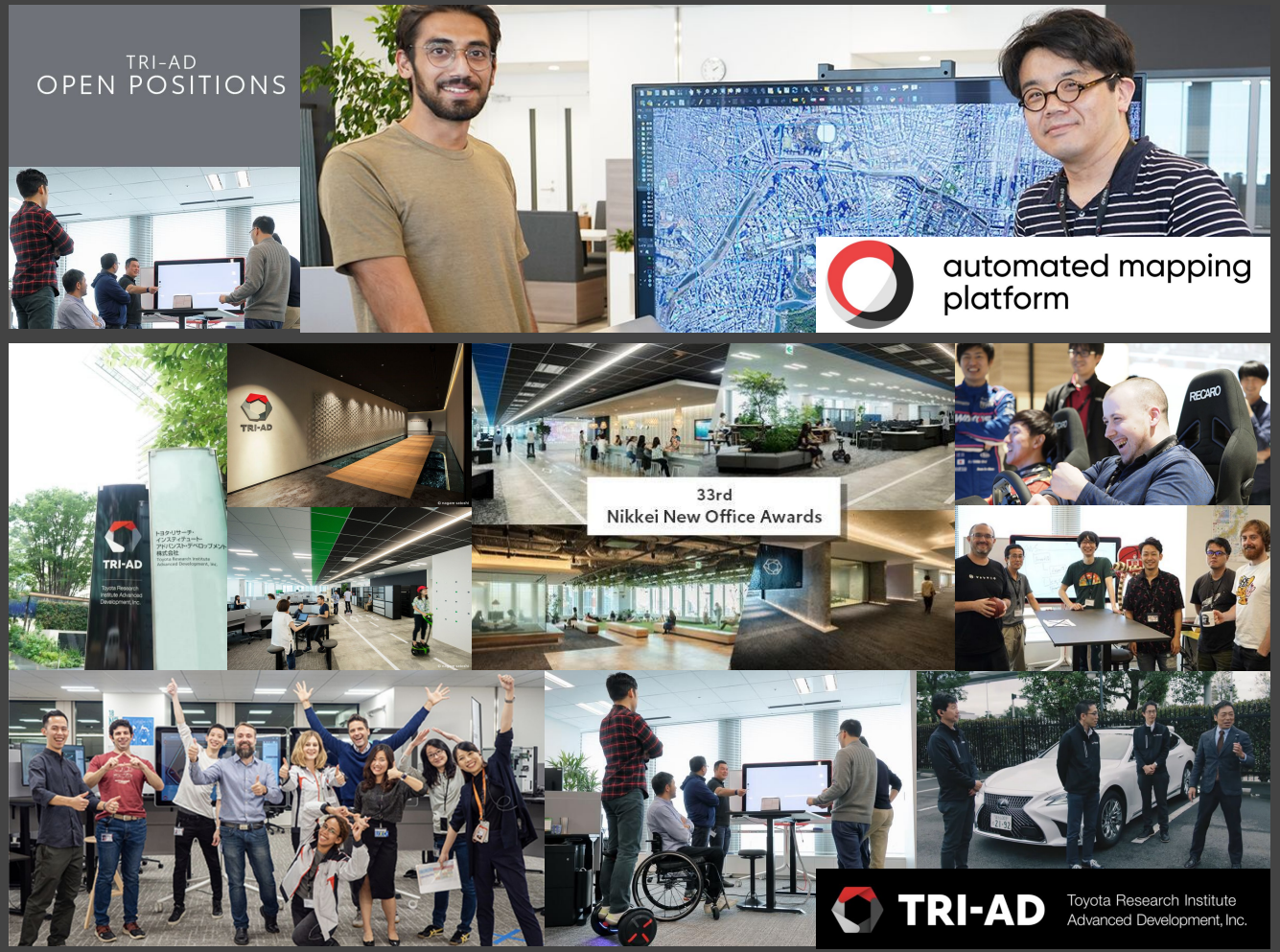

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