

Title (en)

SYSTEM AND METHOD FOR PROXIMATE VEHICLE INTENTION PREDICTION FOR AUTONOMOUS VEHICLES

Title (de)

SYSTEM UND VERFAHREN ZUR VORHERSAGE DER ABSICHT EINES FOLGENDEN FAHRZEUGS FÜR AUTONOME FAHRZEUGE

Title (fr)

SYSTÈME ET PROCÉDÉ DE PRÉDICTION D'INTENTION DE VÉHICULE À PROXIMITÉ DESTINÉS À DES VÉHICULES AUTONOMES

Publication

**EP 3803833 A4 20220309 (EN)**

Application

**EP 19810795 A 20190531**

Priority

- US 201815994103 A 20180531
- US 201815994138 A 20180531
- US 2019034882 W 20190531

Abstract (en)

[origin: WO2019232355A1] A system and method for proximate vehicle intention prediction for autonomous vehicles are disclosed. A particular embodiment is configured to: receive perception data associated with a host vehicle; extract features from the perception data to detect a proximate vehicle in the vicinity of the host vehicle; generate a trajectory of the detected proximate vehicle based on the perception data; generate, using a trained intention prediction model, a predicted intention of the detected proximate vehicle based on the perception data and the trajectory of the detected proximate vehicle; generate, using the predicted intention of the detected proximate vehicle, a predicted trajectory of the detected proximate vehicle; and output the predicted intention and predicted trajectory for the detected proximate vehicle to another subsystem.

IPC 8 full level

**G08G 1/16** (2006.01); **B60W 50/00** (2006.01); **B60W 60/00** (2020.01); **G06V 10/25** (2022.01); **G06V 10/34** (2022.01); **G06V 10/82** (2022.01); **G06V 10/84** (2022.01); **G06V 20/58** (2022.01)

CPC (source: EP)

**B60W 60/00272** (2020.02); **G06V 10/25** (2022.01); **G06V 10/34** (2022.01); **G06V 10/82** (2022.01); **G06V 10/85** (2022.01); **G06V 20/58** (2022.01); **G08G 1/166** (2013.01); **B60W 2050/0014** (2013.01); **B60W 2554/4045** (2020.02)

Citation (search report)

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- [X] SCHREIER MATTHIAS ET AL: "An Integrated Approach to Maneuver-Based Trajectory Prediction and Criticality Assessment in Arbitrary Road Environments", IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, IEEE, PISCATAWAY, NJ, USA, vol. 17, no. 10, 1 October 2016 (2016-10-01), pages 2751 - 2766, XP011625592, ISSN: 1524-9050, [retrieved on 20161010], DOI: 10.1109/TITS.2016.2522507
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- [A] LENZ DAVID ET AL: "Deep neural networks for Markovian interactive scene prediction in highway scenarios", 2017 IEEE INTELLIGENT VEHICLES SYMPOSIUM (IV), IEEE, 11 June 2017 (2017-06-11), pages 685 - 692, XP033133828, DOI: 10.1109/IVS.2017.7995797
- See references of WO 2019232355A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2019232355 A1 20191205**; AU 2019278974 A1 20210107; CN 112272844 A 20210126; CN 112272844 B 20230203; CN 115848416 A 20230328; EP 3803833 A1 20210414; EP 3803833 A4 20220309

DOCDB simple family (application)

**US 2019034882 W 20190531**; AU 2019278974 A 20190531; CN 201980036132 A 20190531; CN 202310052438 A 20190531; EP 19810795 A 20190531