

**CURRICULUM VITAE ABREVIADO (CVA)**

**IMPORTANT** – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

**Part A. PERSONAL INFORMATION**

First name	José Eugenio		
Family name	Naranjo Hernández		
Gender (*)	Male	Birth date (dd/mm/yyyy)	14/02/1975
Social Security, Passport, ID number	ID: 03467056J	Passport: AE990446	
e-mail	joseeugenio.naranjo@upm.es	URL Web: www.insia-upm.es	
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-4211-9419		

(\*) *Mandatory*

**A.1. Current position**

Position	Catedrático de Universidad		
Initial date	18/07/2022		
Institution	Universidad Politécnica de Madrid		
Department/Center	INSIA		
Country	Spain	Teleph. number	+34 910678878
Key words	Intelligent Transportation Systems Autonomous and connected driving Artificial Intelligence V2X Communications		

**A.2. Previous positions (research activity interruptions, indicate total months)**

Period	Position/Institution/Country/Interruption cause
2007 - 2022	Profesor Titular de Universidad/UPM/Spain
1999 - 2007	Investigador/CSIC/Spain

**A.3. Education**

PhD, Licensed, Graduate	University/Country	Year
Computer Science and Artificial Intelligence	Universidad Politécnica de Madrid/Spain	2005

(Include all the necessary rows)

**Part B. CV SUMMARY** (max. 5000 characters, including spaces)

Nº Sexenios de investigación: 3 (2019)

Nº Sexenios tecnológicos: 1 (2018)

JCR Articles: 58

H Index (WoS): 22

Thesis supervised: 4

Total cites: 1764

José Eugenio Naranjo (PhD in Computer Science) is Professor of the Universidad Politécnica de Madrid. His research area includes the Intelligent Systems and Automation Engineering, Intelligent Transport Systems, intelligent control and autonomous vehicle navigation, focusing on defense applications.



Prof. Naranjo is principal investigator of more than 20 research projects, as part of the University Institute for Automobile Research (INSIA) and is author of more than 100 scientific publications. As part of these projects, prof. Naranjo has experience in AI/ML platforms, ML/AI models and associated challenges.

Prof. Naranjo has received five awards in the field of research of intelligent and automated mobility.

Prof. Naranjo is a member of several scientific and editorial committees, among which we can highlight his role as editor of the IEEE Transactions on Intelligent Transportation Systems magazine, belonging to the organizing committees of the most relevant conferences in the sector such as the IEEE Intelligent Vehicle Symposium and the IEEE Intelligent Transportation Systems Conference., Being also a member of the Society of Intelligent Transport Systems of IEEE, holding the position of Vice President in the Spanish Committee of IEEE-ITS.

Additionally, prof. Naranjo belongs to the panel of experts of the European Commission for the area of ICT for Transport and GNSS-Galileo, serving as an evaluator and reviewer of European projects from 2007 to the present, both in FP7 and HE, exploiting excellent writing and communication skills.

Prof. Naranjo has also experience in collaboration with defense industry and the Spanish Ministry of Defense on for the conduct of scientific and experimentation on technologies focused to Spanish Army.

## **Part C. RELEVANT MERITS** (*sorted by typology*)

### **C.1. Publications** (*see instructions*)

1. J. E. Naranjo, A. Valle, A. Cruz, M. Martín, M. Anguera, P. García, F. Jiménez, Automation of haulers for debris removal in tunnel construction, *Computer-Aided Civil and Infrastructure Engineering*, 2023
2. Naranjo, J., Jimenez, F., Castineira, R., Gil, M., Premebida, C., Serra, P., Valejo, A., Nashashibi, F. and Magalhaes, C. Cross-Border interoperability for Cooperative, Connected and Autonomous Driving. *IEEE Intelligent Transportation Systems Magazine*, 2022.
3. López, L. F. D. M., García, F. S., Naranjo Hernández, J. E., & Blas, N. G. Speed Proportional Integrative Derivative Controller: Optimization Functions in Metaheuristic Algorithms. *Journal of Advanced Transportation*, 2021.
4. Barba-Guaman, L., Eugenio Naranjo, J., & Ortiz, A. Deep learning framework for vehicle and pedestrian detection in rural roads on an embedded GPU. *Electronics*, 9(4), 589, 2020
5. Naranjo, J. E., Jimenez, F., Anguita, M., & Rivera, J. L. Automation kit for dual-mode military unmanned ground vehicle for surveillance missions. *IEEE Intelligent Transportation Systems Magazine*, 12(4), 125-137, 2020.
6. Silva, I., & Eugenio Naranjo, J. A systematic methodology to evaluate prediction models for driving style classification. *Sensors*, 20(6), 1692, 2020.
7. José Eugenio Naranjo; Alberto Díaz; Edgar Talavera. A Review of Security Aspects in Vehicular Ad-Hoc Networks. *IEEE Access*. 2019.
8. José Javier Anaya; José Eugenio Naranjo; María Calderón; Felipe Jiménez; Ignacio Soto. Reducing Unnecessary Alerts in Pedestrian Protection Systems Based on P2V Communications. *Electronics*. 8 – 3600, 2019
9. Trinidad Ruiz; María José Hernández; Elisa Pérez; Francisco Serradilla; Sofía Sánchez; José Eugenio Naranjo; Felipe Jiménez. Communications and Driver Monitoring Aids for Fostering SAE Level-4 Road Vehicles Automation. *Electronics*. 7 - 228, 2018.



10. Edgar Talavera; Alberto Díaz-Álvarez; Felipe Jiménez; José E. Naranjo. Impact on Congestion and Fuel Consumption of a Cooperative Adaptive Cruise Control System with Lane-Level Position Estimation. *Energies*. 2018, 11, 194, pp. 1 - 17. Suiza CLAVE: R SCIMDPI, 2018.

**C.3. Research projects**, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

1. Proyecto: Sistema de arbitraje distribuido para conducción cooperativa conectada y autónoma en entornos complejos (CCAD). Investigador Principal: José Eugenio Naranjo y Felipe Jiménez. Entidad Financiadora: DESARROLLO E INNOVACIÓN ORIENTADA A LOS RETOS DE LA SOCIEDAD. PID2019-104793RB-C33. PROGRAMA ESTATAL DE INVESTIGACIÓN. Duración: 2020-2023.

2. Proyecto: Movilidad 2030. Investigador Principal: José Eugenio Naranjo. Entidad Financiadora: Misiones 2020. MIG-20201040 Tipo de entidad: Agencia Estatal. Duración: 2020-2023.

3. Proyecto: COMBAT UGV - Combat-Unmanned Ground Vehicle. Desarrollo de un UGV Armado tele-operado remotamente con comunicaciones seguras. Investigador Principal: José Eugenio Naranjo y Felipe Jiménez. Entidad financiadora: Ministerio de Defensa. Dirección General de Armamento y Material (DGAM). Número de expediente 1003219005500. Duración: 2020-2021.

4. Proyecto: AVENTURA. Sistema para la automatización de vehículos de transporte público y compartido destinados a entornos semi-estructurados, Investigador Principal: José Eugenio Naranjo y Felipe Jiménez. Entidad financiadora: Proyectos I+D+i Pruebas de Concepto 2021. PCD2021-121517-C32. Duración: 2021-2023.

5. Proyecto: Investigación de Tecnologías y Arquitecturas para el Desarrollo del Nuevo Vehículo Autónomo, Conectado, Robusto, Fiable y Resiliente. Investigador Principal: José Eugenio Naranjo y Felipe Jiménez. Entidad financiadora: Entidad financiadora: Programa Tecnológico de Automoción Sostenible (PTAS). PTAS-20211009. Duración: 2021-2024.

6. Proyecto: Infraestructura inteligente de monitorización del tráfico para la gestión de la movilidad: conectividad, Investigador Principal: José Eugenio Naranjo y Felipe Jiménez. Entidad financiadora: Proyectos I+D+i Pruebas de Concepto 2022. PID2019-104793RB-C33. Duración: 2022-2024.

7. Proyecto: SEGVAUTO 4.0. Investigador Principal: José Eugenio Naranjo Hernández. Entidad Financiadora: Comunidad de Madrid. Duración: 2019-2023.

8. Proyecto: TUNNELAD Tunnel Autonomous Driving. Investigador Principal: José Eugenio Naranjo. Entidad Financiadora: Retos 2017 RTC-2017-6382-4 Tipo de entidad: Agencia Estatal. Duración: 02/07/2018 - 01/07/2021.

9. Proyecto: CAV- Integración de Sistemas Cooperativos para Vehículos Autónomos en Tráfico Compartido. Investigador Principal: José Eugenio Naranjo y Felipe Jiménez. Entidad Financiadora: DESARROLLO E INNOVACIÓN ORIENTADA A LOS RETOS DE LA SOCIEDAD. TRA2016-78886-C3-3-R. PROGRAMA ESTATAL DE INVESTIGACIÓN. Duración: 2017-2020.

10. Proyecto: C-ROADS. Investigador Principal: Felipe Jiménez. Entidad financiadora: INEA/CEF/TRAN/M2016/1362448. Action No: 2016-ES-TM-0272-S. Duración: 2017-2020.

11. Proyecto: AUTOCITS, Regulation Study in the Adoption of the autonomous driving in the European Urban Nodes. Investigador Principal: José Eugenio Naranjo. Entidad Financiadora: INEA/CEF/TRAN/M2015/1143746. Action No: 2015-EU-TM-0243-S. Duración: 2016-2019.

**C.4. Contracts, technological or transfer merits**, Include patents and other industrial or intellectual property activities (contracts, licenses, agreements, etc.) in which you have collaborated. Indicate: a) the order of signature of authors; b) reference; c) title; d) priority countries; e) date; f) Entity and companies that exploit the patent or similar information, if any

**Patent**



INVENTORS / AS (signature p.o.): F. Jiménez, J.E. Naranjo, M. González, O. Gómez

TITLE: Equipment to automatically control the direction of a vehicle

APPLICATION NUMBER: P201330627 PRIORITY COUNTRY: PRIORITY DATE: 2013

HOLDER ENTITY: Universidad Politécnica de Madrid

COUNTRIES TO WHICH IT HAS BEEN EXTENDED: Spain

### **C.5, C.6, C.7... Other merits**

#### **Academic positions**

UPM – ETSISI: MSc Coordinator 01/09/2015 – present.

UPM – ETSISI: Department Secretary 28/04/2009 - 30/04/2012.

UPM – ETSISI: Vice-Dean: 20/11/2008 - 28/04/2009.

#### **Positions in scientific societies**

Secretary/Trasurer. IEEE ITS Society, Spanish Chapter. 2015 –2016.

Vice-presidente IEEE ITS Society, Spanish Chapter. 2018 – 2020.

Presidente IEEE ITS Society, Spanish Chapter. 2020 – actualidad.