

**HORIZON
2020**

Enhanced real time services for an optimized multimodal mobility relying on cooperative networks and open data

Risultati

Informazioni relative al progetto

TIMON

ID dell'accordo di sovvenzione: 636220

[Sito web del progetto](#)

DOI

[10.3030/636220](https://doi.org/10.3030/636220)

Progetto chiuso

Data della firma CE

14 Aprile 2015

Data di avvio

1 Giugno 2015

Data di completamento

30 Novembre 2018

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SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

Costo totale

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Contributo UE

€ 5 605 213,00

Coordinato da

UNIVERSIDAD DE LA IGLESIA DE
DEUSTO ENTIDAD RELIGIOSA



Spain

CORDIS fornisce collegamenti ai risultati finali pubblici e alle pubblicazioni dei progetti ORIZZONTE.

I link ai risultati e alle pubblicazioni dei progetti del 7° PQ, così come i link ad alcuni tipi di risultati specifici come dataset e software, sono recuperati dinamicamente da [.OpenAIRE](#).

Risultati finali

Documents, reports (3)

[Publishable summary v3](#) 

Update Publishable summary

[Publishable summary v2](#) 

Update Publishable summary

[Publishable summary v1](#) 

Publishable summary

Websites, patent fillings, videos etc. (4)

[Social network profiles](#) 

[Dissemination material: compilation of articles, flyers, brochures, etc., for the project diffusion](#) 

Dissemination material will consist of the flyers, brochures, posters, banners and other material.

[Project web site](#) 

Project web site: will describe the developed structure and contents of the TIMON website, together with the plans to keep it up to date throughout the project

[Questionnaires](#) 

Questionnaires for feedback retrieval.

Pubblicazioni

Conference proceedings (10)

[Time-controlled Neighborhood-driven Policy-based Network Selection Algorithm for Message Dissemination in Hybrid Vehicular Networks](#) 

Autori: Oleg Oleinichenko, Yagmur Sevilmiş, Karsten Roscher, Josef Jiru

Pubblicato in: Proceedings of the 4th International Conference on Vehicle Technology and Intelligent Transport Systems, 2018, Pagina/e 141-155, ISBN 978-989-758-293-6

Editore: SCITEPRESS - Science and Technology Publications

DOI: 10.5220/0006705901410155

[Low-cost GNSS/INS/Odometric sensor fusion platform for ground intelligent transportation systems](#)



Autori: Arribas, Javier; Moragrega, Ana; Fernández-Prades, Carles; Closas, Pau

Pubblicato in: Design, Implementation, and Performance in the Urban Canyon of a Low-cost GNSS/INS/Odometric Sensor Fusion Platform for Ground Intelligent Transportation Systems, Numero 1, 2017

Editore: the ION GNSS+ 2017

DOI: 10.5281/zenodo.1037318

[Application of Artificial Intelligence Techniques to Traffic Prediction and Route Planning, the vision of TIMON project](#)

Autori: E. Osaba; P. Lopez-Garcia; E. Onieva; A.D. Masegosa; L. Serrano; H. Landaluce

Pubblicato in: 12th ITS European Congress, Numero 2, 2017

Editore: ERTICO ITS Europe

DOI: 10.5281/zenodo.894075

[Know Thy Neighbor - A Data-Driven Approach to Neighborhood Estimation in VANETs](#)

Autori: Karsten Roscher, Thomas Nitsche, Rudi Knorr

Pubblicato in: 2017 IEEE 86th Vehicular Technology Conference (VTC-Fall), 2017, Pagina/e 1-5, ISBN 978-1-5090-5935-5

Editore: IEEE

DOI: 10.1109/VTCFall.2017.8288303

[Towards the development of real time services for an optimized multimodal mobility supported by cooperative networks and open data - Advances in TIMON project](#)

Autori: Hugo Landaluce,; Leire Serrano; Enrique Onieva; Antonio D. Masegosa; Eneko Osaba; Pedro Lopez

Pubblicato in: TRA conference 2018 (TRAconf), Vienna, Austria, 16-19 April 2018, Numero 2, 2018

Editore: TRAconf

DOI: 10.5281/zenodo.1309250

[A Technology-agnostic GNSS/INS Real-time Sensor Fusion Platform with Ultra Wide Band Cooperative Distance Measurements for Terrestrial Vehicle Navigation](#)

Autori: Javier Arribas, Monica Navarro, Ana Moragrega, David Calero, Enric Fernández, Jordi Vilà-Valls, Carles Fernández-Prades

Pubblicato in: Proceedings of the 31st International Technical Meeting of The Satellite Division of the Institute of Navigation (ION GNSS+ 2018), 2018, Pagina/e 1967-1984, ISBN 0-936406-10-0

Editore: Institute of Navigation

DOI: 10.33012/2018.16014

[Transportation Ecosystem Framework in Fog to Cloud Environment](#)

Autori: Matija Cankar, Saso Stanovnik, Hugo Landaluce

Pubblicato in: 2018 IEEE/ACM International Conference on Utility and Cloud Computing Companion (UCC Companion), 2018, Pagina/e 266-271, ISBN 978-1-7281-0359-4

Editore: IEEE

DOI: 10.1109/UCC-Companion.2018.00066

[Comparison between Golden Ball Meta-heuristic, Evolutionary Simulated Annealing and Tabu Search for the Traveling Salesman Problem](#)

Autori: Eneko Osaba, Roberto Carballedo, Pedro Lopez-Garcia, Fernando Diaz

Pubblicato in: Proceedings of the 2016 on Genetic and Evolutionary Computation Conference Companion - GECCO '16 Companion, 2016, Pagina/e 1469-1470, ISBN 9781-450343237

Editore: ACM Press

DOI: 10.1145/2908961.2931634

[TIMON Project - Description and Preliminary Tests for Traffic Prediction Using Evolutionary Techniques](#)

Autori: Eneko Osaba, Pedro López-Garcia, Antonio D. Masegosa, Enrique Onieva, Hugo Landaluce, Asier Perallos

Pubblicato in: Proceedings of the 2016 on Genetic and Evolutionary Computation Conference Companion - GECCO '16 Companion, 2016, Pagina/e 1471-1472, ISBN 9781-450343237

Editore: ACM Press

DOI: 10.1145/2908961.2931635

Xlab Research: Experiences on Applications for Smart Cities and Future Society

Autori: Matija Cankar

Pubblicato in: Information Society multi-conference (IS2015). Workshop Smart cities and communities as a development opportunity for Slovenia, 2015, Pagina/e 46-49, ISBN 978-961-264-090-3

Editore: Institute Jožef Stefan

Book chapters (5)



[Applications of Soft Computing in Intelligent Transportation Systems](#)

Autori: Antonio D. Masegosa, Enrique Onieva, Pedro Lopez-Garcia, Eneko Osaba

Publicato in: Soft Computing Based Optimization and Decision Models, 2017, Pagina/e 63-81

Editore: Springer International Publishing

DOI: 10.1007/978-3-319-64286-4_4

[Ensemble and Fuzzy Techniques Applied to Imbalanced Traffic Congestion Datasets: A Comparative Study](#)

Autori: Pedro Lopez-Garcia, Antonio D. Masegosa, Enrique Onieva, Eneko Osaba

Publicato in: Bioinspired Optimization Methods and Their Applications, Numero 10835, 2018, Pagina/e 185-196, ISBN 978-3-319-91640-8

Editore: Springer International Publishing

DOI: 10.1007/978-3-319-91641-5_16

[An Evolutionary Discrete Firefly Algorithm with Novel Operators for Solving the Vehicle Routing Problem with Time Windows](#)

Autori: Eneko Osaba, Roberto Carballedo, Xin-She Yang, Fernando Diaz

Publicato in: Nature-Inspired Computation in Engineering, 2016, Pagina/e 21-41, ISBN 978-3-319-30235-5

Editore: Springer International Publishing

DOI: 10.1007/978-3-319-30235-5_2

[Hybrid Optimization Method Applied to Adaptive Splitting and Selection Algorithm](#)

Autori: Pedro Lopez-Garcia, Michał Woźniak, Enrique Onieva, Asier Perallos

Publicato in: Hybrid Artificial Intelligent Systems, 2016, Pagina/e 742-750, ISBN 978-3-319-32034-2

Editore: Springer International Publishing

DOI: 10.1007/978-3-319-32034-2_62

[Short-Term Traffic Congestion Forecasting Using Hybrid Metaheuristics and Rule-Based Methods: A Comparative Study](#)

Autori: Pedro Lopez-Garcia, Eneko Osaba, Enrique Onieva, Antonio D. Masegosa, Asier Perallos

Publicato in: Advances in Artificial Intelligence, 2016, Pagina/e 290-299, ISBN 978-3-319-44636-3

Editore: Springer International Publishing

DOI: 10.1007/978-3-319-44636-3_27

Peer reviewed articles (9)



[Good practice proposal for the implementation, presentation, and comparison of metaheuristics for solving routing problems](#)

Autori: E. Osaba, R. Carballado, F. Diaz, E. Onieva, A.D. Masegosa, A. Perallos
Pubblicato in: Neurocomputing, Numero 271, 2018, Pagina/e 2-8, ISSN 0925-2312
Editore: Elsevier BV
DOI: 10.1016/j.neucom.2016.11.098

[Fog and Cloud in the Transportation, Marine and eHealth Domains](#) 

Autori: Matija Cankar, Eneko Olivares Gorriti, Matevž Markovič, Flavio Fuat
Pubblicato in: Fog and Cloud in the Transportation, Marine and eHealth Domains, Numero Euro-Par 2017: Euro-Par 2017: Parallel Processing Workshops, 2018, Pagina/e 292-303, ISSN 0302-9743
Editore: Springer Verlag
DOI: 10.1007/978-3-319-75178-8_24

[Ensemble Classification for Imbalanced Data Based on Feature Space Partitioning and Hybrid Metaheuristics](#) 

Autori: P. Lopez-Garcia, A. D. Masegosa, E. Osaba, E. Onieva, A. Perallos
Pubblicato in: Applied Intelligence, 2019, ISSN 0924-669X
Editore: Kluwer Academic Publishers
DOI: 10.1007/s10489-019-01423-6

[GACE: A meta-heuristic based in the hybridization of Genetic Algorithms and Cross Entropy methods for continuous optimization](#) 

Autori: P. Lopez-Garcia, E. Onieva, E. Osaba, A.D. Masegosa, A. Perallos
Pubblicato in: Expert Systems with Applications, Numero 55, 2016, Pagina/e 508-519, ISSN 0957-4174
Editore: Pergamon Press Ltd.
DOI: 10.1016/j.eswa.2016.02.034

[An improved discrete bat algorithm for symmetric and asymmetric Traveling Salesman Problems](#) 

Autori: Eneko Osaba, Xin-She Yang, Fernando Diaz, Pedro Lopez-Garcia, Roberto Carballado
Pubblicato in: Engineering Applications of Artificial Intelligence, Numero 48, 2016, Pagina/e 59-71, ISSN 0952-1976
Editore: Pergamon Press Ltd.
DOI: 10.1016/j.engappai.2015.10.006

[A Comparative Study on the Performance of Evolutionary Fuzzy and Crisp Rule Based Classification Methods in Congestion Prediction](#) 

Autori: E. Onieva, P. Lopez-Garcia, A.D. Masegosa, E. Osaba, A. Perallos
Pubblicato in: Transportation Research Procedia, Numero 14, 2016, Pagina/e 4458-4467, ISSN 2352-1465
Editore: Elsevier
DOI: 10.1016/j.trpro.2016.05.368

[A Hybrid Method for Short-Term Traffic Congestion Forecasting Using Genetic Algorithms and Cross Entropy](#) 

Autori: Pedro Lopez-Garcia, Enrique Onieva, Eneko Osaba, Antonio D. Masegosa, Asier Perallos

Pubblicato in: IEEE Transactions on Intelligent Transportation Systems, Numero 17/2, 2016, Pagina/e 557-569, ISSN 1524-9050

Editore: Institute of Electrical and Electronics Engineers

DOI: 10.1109/TITS.2015.2491365

[A migration strategy for distributed evolutionary algorithms based on stopping non-promising subpopulations: A case study on routing problems](#) 

Autori: Asier Perallos; Fernando Diaz; Roberto Carballedo; Eneko Osaba; Pedro Lopez; Enrique Onieva

Pubblicato in: International Journal of Artificial Intelligence, Numero Vol 13 no.2, 2015, ISSN 0974-0635

Editore: CESER Publications

DOI: 10.5281/zenodo.209408

[A discrete firefly algorithm to solve a rich vehicle routing problem modelling a newspaper distribution system with recycling policy](#) 

Autori: Eneko Osaba, Xin-She Yang, Fernando Diaz, Enrique Onieva, Antonio D. Masegosa, Asier Perallos

Pubblicato in: Soft Computing, 2016, ISSN 1432-7643

Editore: Springer Verlag

DOI: 10.1007/s00500-016-2114-1

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