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PhD student in Civil Engineering
Title of the thesis: "*Traffic state estimation and automatic model calibration based on real-time observation*"

Diplomas

- 2015 : Master degree – option Civil Engineering
- 2015 : Engineer degree of the National school of public works of state.

Key Areas

- Dynamical Traffic Modeling
- Model Errors Propagation
- Data Assimilation
- Online Model Calibration

Work experiences

- Since 2015 : PhD student at IFSTTAR / ENTPE / University of Lyon, Lyon, France.
- 2015 : Research assistant at IFSTTAR / ENTPE / University of Lyon, Lyon, France.
- 2014 : Research assistant at the Department of Engineering Mathematics, University of Bristol, Bristol, UK

Higher education activities

Speaker

- Since 2015 : Conceptual Informatics and Programming Language, ENTPE 1st year, 36h
- Since 2016 : Experimentation, Physics and Analyze of the Traffic, ENTPE 1st year, 12h
- Since 2016 : Control and Exploitation of Transports, ENTPE 2nd year, 9h

Reviewing activities

- TRB Transportation Research Board annual meeting

Publications

Publications in journals with selection panel (2)

- Clairais, A., Duret, A., El Faouzi, NE, Error propagation in traffic modeling: Solution for the mesoscopic LWR model, submitted
- Clairais, A., Duret, A., El Faouzi, NE, Calibration of the fundamental diagram based on loop and probe data, Transportation Research Record (2560), pp. 17-25, 2016.

Publications in international conference proceedings with selection panel (2)

- Clairais, A., Duret, A., El Faouzi, NE, Error propagation within the Lagrangian-Space LWR model: analytical solutions, accepted for presentation at the European Association for Research in Transportation (hEART), 13-16 September, Delft, (Netherland), 18p.
- Clairais, A., Duret, A., El Faouzi, NE, Calibration of the fundamental diagram based on loop and probe data, accepted for presentation at the 95th Transportation Research Board Annual Meeting (TRB), 11-17 January, Washington, (USA) [CDROM]. Washington DC: Transportation Research Board, 2016, 17p.

Development

- Since 2016, development of a prototype of dynamical mesoscopic traffic simulation tool for model errors propagation tracking and data assimilation.