Thomas Capelle

Creative Engineering

73000, Chambéry France ⑤ (+33) 781 45 60 16 ⋈ tcapelle@protonmail.com ¹¹¹ tcapelle.github.io/ Belgian-Chilean, 34



Professional Experience

2020-today ML Engineer, STEADYSUN, Le Bourget du Lac (France).

- State of the art forecasting using Deep Learning, model serving and production with torchserve.
- Piloting research colab with Nvidia in model serving and deployment.
- Semantic Segmentation and Optical Flow
- End2End Cloud Images to irradiance forecasting (ViT/Seq2Seq models)

2018-2020 **Research Engineer**, INES CEA, Grenoble (France).

- Development of algorithms for failure detection in Photovoltaic Systems
- Deep Learning model for parameter regression for IV- curve of photovoltaic modules
- Thermal Image segmentation and classification model
- Project engineer and coordination for Franco-Chilean partnership, international cooperation with multidisciplinary laboratories.
- 2017-2018 **Post-doc**, INSERM INRIA, Grenoble (France).
 - Integration of spatial models with air quality and forecast models.

2013–2016 **PhD**, équipe STEEP, INRIA, Grenoble (France).

- Development of mathematical frameworks for urban/transport model calibration
- Multidisciplinary team work (Engineers, Economists, Urbanists)
- Supervision of interns work
- International conferences and peer-reviewed publications
- 2011 $\mbox{ Master Internship}, \mbox{ CIRRELT}, \mbox{ Polytech}, \mbox{ Montréal (Canada)}.$

Location and Routing modelling: Development of algorithms for logistics

summer 2010 **Development Engineer**, LABTUS, Santiago (Chile).

Development of algorithms to estimate attractors for MUSSA models for Santiago

2010 Assistant Profesor, Universidad de los Andes, Santiago (Chile).
Analysis and Algebra for engineers

Education

- 2013–2016 PhD Mathematics-Computer Science, Université de Grenoble-Alpes, Grenoble.
- 2011–2012 Master in Sciences, Transportation Economics, Universidad de Chile, Santiago.
- 2004-2012 Engineer in Applied Mathematics, Universidad de Chile, Santiago.

Computer Skills

Coding Python (Pytorch ecosystem contributor, numpy, pandas, sklearn), CI/CD, Docker

Software Latex, word processing, Adobe suite, Linux, Mac and Windowz

Languages

Spanish: mothertongue, Franch: bilingual, English: bilingual.

Other Interests

- Experienced Sailor, sailed many classes and two world championships
- Guitar player (10 years) and blues lover
- Director and Producer of a DVD, for the Chilean musician Alejandro Silva
- Actor, Technical Director and Production in the chilean TV series EFECTO PICAFLOR (2002-2010)