

Tom DUPRÉ LA TOUR

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Education

2015-2018 **Telecom ParisTech** – Paris (France)

In Progress

- PhD in applied mathematics and neuroscience: Non-linear auto-regressive models for EEG/MEG signals analysis, induced by speech or music.
- Supervised by Alexandre Gramfort and Yves Grenier.

2013-2014 **Ecole Polytechnique Federale de Lausanne (EPFL)** - Lausanne (Switzerland)

- Master in Information technology, in english. Signal processing, image processing, video compression, machine learning, distributed information systems, wireless transmission algorithms, photonic
- Research project on human echolocation

2010-2013 **Ecole polytechnique** – Palaiseau (France)

- 1st et 2nd years : cross-curricular formation, with maths, physics and informatics
- 3rd year : specialization in Electrical Engineering : Computer architecture, printed circuit board design, semiconductor physics, photovoltaic, signal processing, opto-electronic

2008-2010 **Lycee Saint Louis** – Paris (France)

- A 2-year intensive undergraduate program for admission to France's top engineering school

Experience

2015 **Telecom ParisTech** – Paris (France)

5 months

- R&D Engineer, on open-source project Scikit-Learn, library of machine learning in Python
- Implementation of optimization algorithms (SAG, NMF), library maintenance

2014-2015 **DxO Labs** – Boulogne-Billancourt (France)

6 months

- Search in image processing, on motion deblurring.
- State of the art audit, full prototyping in Matlab, substantial improvements

2013 **Institut d'Electronique Fondamentale** – (Institute of Pure Electronics) Orsay (France)

3 months

- Search on a new calculus paradigm using stochastic binary signals
- Matlab simulations and implementation of these gates with analogic CMOS circuit (with Cadence)
- Summa cum laude (Ecole polytechnique)

2012 **VCORE Solutions** – Bethpage NY (USA)

1.5 months

- Creation of a learning support for a professional exam

2010-2011 **Paris Fire Brigade** – Paris (France)

7 months

- Lead a first responders unit. Professional first aid techniques

Languages

- French Native speaker
- English Advanced level C1 (TOEFL: 101)
- Spanish Intermediate level B2

Other skills

- French BAFA for activity leader
- First aid techniques
- Driving licence

Computer skills

- Python, Matlab, (Java, C++)
- MS Office, LaTeX
- Adobe Photoshop

Interests

- Climbing, snowboard, ski touring
- Jazz and classical music, violin, guitar, choir
- Photography