Pierre-Cyril Aubin-Frankowski

Civil servant at Corps des Ponts, Eaux et Forêts
PhD Candidate in Applied Mathematics

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Education

2018 - 2021 **PhD in Applied Mathematics**, *Mines ParisTech*, Paris.
Machine learning and control theory at the CAS laboratory under the supervision of Prof. N. Petit
Inference of dynamical systems based on vehicle trajectories

2017 - 2018 **Master of Public Policy**, *AgroParisTech et ENPC*, Paris.
Banking and macroeconomics, Law, Environmental dialogue
Master focusing on sustainable development and transportation issues designed for the civil servants of Corps des IPEF

2016 - 2017 **Master of Science (M2)**, *ENS Paris-Saclay*, Cachan.
Machine Learning and Big Data - Highest honors
Specialized in convex optimization and kernel methods
Master MVA (Mathematics-Vision-Learning)

2013 - 2016 **Master of Science**, *École polytechnique*, Palaiseau.
Major : Applied Mathematics
Minor : Quantum Physics and (Neuro)biology

2011 - 2013 **Scientific preparatory class**, *Lycée Louis-le-Grand*, Paris.
MPSI, MP*

Experience

April 2018 - July 2018 **MPP internship**, *Research and Innovation Division, MTES.*
Theme : AI for the scientific and technical agencies of the ministry
Report on the applications of artificial intellgience at the Ministry of Environment

Mars 2017- Aug. 2017 **MS internship**, *CBIO, Ecole des Mines.*
Theme : Gene regulation inference from single-cell RNA sequencing
Recovering dynamics from a time-labeled point cloud of experimental measurements under the supervision of Prof. J-P.Vert

Mars 2016 - July 2016 **Research internship**, *IfA, ETH Zurich.*
Theme : Modeling of cerebral autoregulation
Cyclical systems identification under the supervision of Prof. J.Lygeros

Oct 2013-April 2014 **Civic service**, *Association Tremplin.*
Full-time science teacher in senior high school in the outskirts of Paris

Skills

Programming Languages: Matlab, Python, C/C++, Java, OCaml

Languages: English - Proficient / Italian - Bilingual / Russian - Reading

Other

Painting (president of the Polytechnique Art Society), Opera (representative of Polytechnique Arts Society), Economic history, Foundations of quantum mechanics

Articles

(Accepted at ECC 2020) PCAF and Nicolas Petit, Data-driven approximation of differential inclusions and application to detection of transportation modes, 2020
(Under review at Systems & Control Letters) PCAF, Lipschitz regularity of the minimum time function of differential inclusions with state constraints, 2019