# Tom M. Ragonneau, Ph.D. Candidate

# Computational Mathematics, The Hong Kong Polytechnic University

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#### **Education**

Ph.D., The Hong Kong Polytechnic University, Hong Kong, China

2019-Present

Supported by the University Grants Committee of Hong Kong under the Hong Kong Ph.D. Fellowship Scheme.

Supervised by Dr. Zaikun Zhang and co-supervised by Prof. Xiaojun Chen.

Subject of the dissertation: Model-based derivative-free optimization methods and software.

M.Sc., Toulouse INP-ENSEEIHT, Toulouse, France

2018-2019

Graduated in Performance in Software, Media, and Scientific Computing.

M.Eng., Toulouse INP-ENSEEIHT, Toulouse, France

2016-2019

Graduated in High Performance Computing and Big Data.

CPGE, Carnot high-school, Dijon, France

2014-2016

Two-year program of profound studies for acquiring elementary but crucial scientific knowledge.

## Working experience

Research Assistant, The Hong Kong Polytechnic University, Hong Kong, China

2019

Early development of PDFO, a Python and MATLAB software for using late Prof. M. J. D. Powell's derivative-free optimization solvers (including UOBYQA, NEWUOA, BOBYQA, LINCOA, and COBYLA).

Trainee Engineer, Axians Cloud Builder, Toulouse, France

2018

Prediction of the load balancing of a computing cluster managed by a GPFS system via machine learning tools.

#### **Publications**

#### Peer-reviewed journals

[1] A deep learning approach for estimation of the nearshore bathymetry

R. Benshila, G. Thoumyre, M. Al Najar, G. Abessolo Ondoa, R. Almar, E. Bergsma, G. Hugonnard, L. Labracherie, B. Lavie,

T. M. Ragonneau, S. Ehouarn, B. Vieublé, and D. Wilson

J. Coast. Res. 95.sp1 (2020), pp. 1011-1015

#### **Presentations**

[1] PDFO: a cross-platform MATLAB/Python interface for Powell's derivative-free optimization solvers SIAM Conference on Optimization (OP21), online, July 21, 2021

# **Teaching**

**Revision Tutorial Sessions**, The Hong Kong Polytechnic University, Hong Kong, China

2020-2021

Calculus, Probability & Statistics, and Linear Algebra.

**Examination Invigilations**, The Hong Kong Polytechnic University, Hong Kong, China

2019-Present

Monitored examinations and marked assignments for various subjects.

## Languages

Mother tongue French Other languages

**English** German Cantonese

Understanding				Speaking					Writing
Listening		Reading		Interaction		Production			
C2	Fluent	C2	Fluent	C1	Fluent	C1	Fluent	C1	Fluent
B1	Independent	В1	Independent	В1	Independent	A2	Basic	B1	Independent
A2	Basic	A1	Basic	A1	Basic	A1	Basic	A1	Basic

Common European Framework of Reference for Languages (CEFR)

#### **Personal interests**

Science, technology, music, movies, hiking, scuba diving.