

# Basile Dura

COMPUTER SCIENCE · ARTIFICIAL INTELLIGENCE

☎ (+33) 6 15 60 55 01 | ✉ basile.dura@polytechnique.edu | 🏠 bdura.me | 📷 bdura | 🌐 bdura

## Summary

Passionate about artificial intelligence and soon to graduate from Mila, a renowned institute for machine learning, I am looking for a data science position where I can work on real-world and inspiring applications.

## Education

### Mila & Université de Montréal

Montréal, QC, Canada

MSC IN COMPUTER SCIENCE

2018 - 2020

Mila is an institute for artificial intelligence located in Montréal, founded by Turing Award recipient Yoshua Bengio.

- Studied state-of-the-art methodologies with leading researchers in artificial intelligence.
- Attended highly theoretical courses such as *Probabilistic Graphical Models*, *Representation Learning* and *Reinforcement Learning*.
- Trained on development best practice with real-world applications in project-oriented courses like *Autonomous Vehicles*.

### École Polytechnique

Paris, France

MSC IN APPLIED MATHEMATICS

2014 - 2018

- Attended courses in applied mathematics, physics, mechanics and computer science.
- Specialisation in applied mathematics/computer science: statistics, machine learning and operations research/optimisation.

## Experience

### InVivo AI

Montréal, QC, Canada

RESEARCH INTERN

May 2019 - December 2019

InVivo AI is a Montréal-based and Mila-affiliated startup aiming to bring the power of machine learning to drug discovery.

- Worked as a research scientist, designing algorithms able to cope with the dire data scarcity that plagues the field.
- Main research project: *Adaptive Deep Kernel Learning*, aiming to teach a network to extract knowledge from multiple tasks at once, a paradigm called meta-learning.
- Developed internal tools to schedule training jobs more efficiently, including a web application front-end.

### Ekimetrics

Paris, France

JUNIOR CONSULTANT

September 2017 - February 2018

Ekimetrics is a French data-driven marketing consultancy and a leader in Europe. My missions included:

- Extracting actionable insights from client data, be it marketing spending v. sales or online purchase funnels.
- Working on a research project aiming to give more theoretical groundings to the methodology used in the company.

### IBM Research

Singapore

RESEARCH INTERN

May 2017 - August 2017

- Led a research endeavour focusing on destination inference in the Singaporean public transportation network.
- My work was later published at the AAMAS conference as part of a larger project.

## Papers

### Meta-learning for drug discovery 🔗

InVivo AI

Report on the research projects I carried out at InVivo AI during my eight-month internship.

December 2019

### Adaptive Deep Kernel Learning 🔗

InVivo AI

Paper submitted to NeurIPS 2019. A lighter version was accepted to the meta-learning workshop.

May 2019

### FASTER: Fusion AnalyticS for public Transport Event Response 🔗

IBM Research

Published at the 2019 International Conference On Autonomous Agents and Multi-Agent Systems.

May 2019

## Skills

- Programming** Extensive experience with Python – both high-level frameworks (eg Pytorch, Scikit-Learn) and low-level libraries. Experience with web development, Docker and continuous integration. Familiar with SQL and Java.
- Languages** Native French speaker, fluent in English. Intermediate Spanish skills