

Dylan Bourgeois

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education

- 09/2016
12/2018 Master of Science & Engineering /speciality Robotics + extra credits in Computational Neuroscience, EPFL
- 09/2012
06/2016 Bachelor of Science & Engineering /speciality Microengineering, EPFL
- 06/2012 French Baccaureate, Scientific specialization & advanced Mathematics summa cum laude

publications

Selection Bias in News Coverage: Learning It, Fighting It
D. Bourgeois, J. Rappaz, K. Aberer
[WWW'18](#)

Using holistic information in the Trigger
D. Bourgeois, C. Fitzpatrick, S. Stahl
[LHCb Pub](#)

New approaches for track reconstruction in LHCb's Vertex Locator
C. Hasse, J. Albrecht, B. Couturier, D. Bourgeois, V. Coco, N. Nolte, S. Ponce
[JHEP'18](#)

and also...

- Organizer**, ML Workshop Powercoders, 2018
- Teaching Assistant**
Applied Data Analysis, EPFL, 2017
- Head of IT**
Satellite, EPFL, 2016-2017
- Music programmer**
Sat Rocks Festival, 2016
- Contributor**, Signal for iOS
Open Whisper Systems, 2014
- Freshmen Counselling**
EPFL, 2013
- Student Assistant**, CS 101
EPFL, 2013

currently

SNAP, Stanford / LTS2, EPFL, Sept 2018-Apr 2019

Masters thesis project, working on multimodal representation learning for code similarity, extending text-based IR systems to integrate rich feature information from graph structures and multimodal representations of source code.

did it experience

LHCb Trigger Group, CERN, Feb-Aug 2018

As an intern, investigated machine learning methods which would select interesting particle collisions in a processing-friendly way, using only low-level detector information.

Robot Learning & Interaction Group, IDIAP,
Sept-Dec 2017

As part of a semester project, we were investigating partial joint control on a humanoid robot. This project was finalized by an AR interface based on Tango to control the Baxter robot.

Distributed Information Systems Laboratory (LSIR), EPFL, Feb-Jun 2017

As part of a semester project, we worked on identifying correlations in news coverage using Matrix Factorisation methods, usually used in recommender systems.

Learning Algorithms and Systems Laboratory (LASA), EPFL, Feb-Jun 2016

Studying failure detection, prediction and recovery for robots. Using the robot's internal and external sensors, were trying to determine when a robot task execution was about to fail.

Institut de Robòtica i Informàtica industrial (IRI), UPC-Barcelona, Summer 2016

Extending a visual odometry framework to support inertial readings at a high frequency. This included verifying and implementing IMU preintegration on manifold methods.

Laboratory of Intelligent Systems (LIS), EPFL,
Sept-Dec 2015

Implementation of a free-fall recovery algorithm for a quadcopter, allowing for emergency stabilization or throw recovery.

Museum of Natural History, NYC, Summer 2014

Internship in the Interactives department which creates all multimedia content and interaction software accompanying the museum's exhibits.

can do programming

Python ● C(++) ● JS ● Assembly
Swift ● LaTeX ● Rust ● Haskell

can do software

Matlab ● Solidworks (CAD)
Sketch ● Gantt Project ● ROS
Final Cut Pro ● Premiere Pro
Docker ● Sklearn ● PyTorch
Tensorflow ● Git ● Jupyter

can speak...

French + English (mother tongue)
Spanish (fluent)

and for fun...

Tennis - competitive level
Music curation
Trail running
Film editing
Traveling: Asia, Europe, USA
looking forward to more

