# **Sebastien Dubois**

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### **Education**

Education	
Stanford University (CA, USA) Master's degree in Computational and Mathematical Engineering, Data Science Track	2015 - 2017
École Polytechnique (Palaiseau, France)  Diplôme d'ingénieur (MS) in Computer Science and Applied Mathematics	2012 - 2015 GPA: 3.9/4
<b>Lycée Hoche</b> , <i>Classes préparatoires</i> (Versailles, France) Intensive undergraduate program in science preparing for the national competitive exam to the French <i>Grandes Écoles</i> for scientific studies. Majors: Mathematics, Physics	2010 - 2012 GPA: 4.0/4
Relevant projects & work	
Research internship at CSAIL, MIT (Cambridge, MA, USA)  • Developed Bayesian optimization methods in Python to auto-tune machine learning pipelines	March 15 - July 15

#### **Face recognition** (team of 2)

Oct. 14 - Jan. 14

• Developed C++ software to identify celebrities in photos using machine learning techniques

• Received the Research Internship Award in Computer Science, Publication in review

• Focused on image analysis: extracting specific parts of the face, computing SIFT descriptors

#### **Evolutionary algorithms** (team of 2)

May 14 - June 14

- Implemented and tested a new class of evolutionary algorithms in Java
- Designed such algorithms to efficiently solve complex optimization problems on graphs

### Data storage system distributed on a network (team of 3)

May 14 - June 14

- Built from scratch in Java a self-adaptive system enabling reliable storage
- Challenges tackled: parallel architecture, network communications, robustness

• Designed a new regression algorithm that improved upon Gaussian Processes

## Smart buildings (team of 6)

Sept. 13 - June 14

- Designed a Raspberry Pi platform to manage connected objects with conditional statements
- Integrated smart sensors at development stage despite poor documentation and code interface
- Designed applications by processing the sensor's data to reduce energy consumption

# Work experience & leadership

### Summer internship at ST Microelectronics (Greater Noida, India)

July 14 - Aug. 14

- In charge of STM's hardware integration for a start-up new home automation product
- Designed and prototyped the ZigBee module in a multi-processor architecture

### IT consulting for XProjets, Junior Enterprise at the École Polytechnique

• Reviewed the information system of a charity, Designed a community portal

Sept. 13 - June 14

• In a team of 4, studied car fleet and client management solutions for an innovative taxi service

Leadership training in the French Army at Régiment d'Infanterie Chars de Marine (Poitiers) Sept. 12 - April 13

• Supervised, managed and trained twenty soldiers

## **Hobbies and interests**

Technology enthusiast	Workflow optimization	Travelling
Enjoy discovering new tools and	Willing to investigate best workflows	India, Canada, Brazil, Mexico, Africa
open source projects	for programming, working, and in	Sports
Always eager to learn	life, for fun and efficiency	Swimming (competitive), Windsurfing

# **Skills**

Programming languages	Computing	Foreign languages
Python, Java, C++, R	Git, LaTeX	French: mother tongue
SQL	Windows, Linux	English: full proficiency