

# Alejandro Saldarriaga-Fuertes

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## EDUCATION

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### Ecole Polytechnique (Palaiseau)

*September 2016 to date*

- One of the most preeminent schools of science and engineering
- Working towards an *Ingénieur polytechnicien's* degree, the equivalent to an MSc
- Major in Electrical Engineering
- **Relevant Courses:** Signal Processing, Linear Programming, From the Internet to the IoT, Micro and Nanoelectronic Experimental Design, Algorithm Design and Analysis, Advanced Programming, Massive Data Processing, Optimal Control Theory, Distributions
- **Side Courses:** Continuum mechanics, Fluid mechanics, Relativity and Variational Principles, Advanced Quantum Physics, Statistical Physics, Electromagnetic Waves, Algebra and Galois Theory, Differential Calculus and Complex Analysis, Humanities and Social Science.

### Prépa Saint Louis (Paris V)

*September 2014 to June 2016*

- Leading up to competitive nationwide entrance examinations to the *Grandes Ecoles*
- Studied Mathematics, Physics and Computer Science

### Lycée Sévigné (Paris V)

*September 2012 to June 2014*

- Participated to *Concours Général* in Mathematics, Physics and Biology
- Participated to regional *Concours des Géosciences* in biology, ranked 24<sup>th</sup>

## RESEARCH EXPERIENCES

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- PSC (Collective Scientific Project) on linguistic accents detection using convolutional neural networks (1 year)
- Conception of a basket optimization algorithm for a startup (6 months)

## HONORS

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- *Baccalauréat* (A-levels equivalent) with high-honors
- English speaking section diploma (English History class)

## WORK EXPERIENCE

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### Private Teacher

*November 2017 – to date*

- Providing help in mathematics two hours a week for students in preparatory schools.

### Internship in BNP CIB Global Markets

*April 2018 – August 2018*

- Carried several little projects handling databases and market data
- Developed a back-test environment for trading algorithms
- Tested an adaptation of an existing mathematical finance model with the back-test environment

### Internship in the Air Force

*October 2016 – April 2017*

- Carried out a 4 months computer project with two others students
- Continued the development of an airplane planning software (ActiX) designed specifically for the unit by older Polytechnique students
- Created a planning software for the staff from scratch(PlanniX)

### Military Service

*September 2016 – October 2016*

## SKILLS

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**Advanced skills :** Programming in Visual Basic, Java, C++, HTML5, CSS, JavaScript, Python and CamL

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**Languages** : French (mother tongue); Spanish (mother tongue); English (fluent) 9 years of practice

## EXTRACURRICULAR ACTIVITIES

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- Piano since 2006 in a conservatory (Jaques Ibert, Paris XIX) : Third cycle Third year.  
Working towards the CEM (Certificate of Music Studies)
- Poster designer and charged of communication in a cinephile student organization
- Member of a charitable student organization
- Music creation and mixing
- Avid tennis player