

## EDUCATION

<b>Cambridge, MA</b> <ul style="list-style-type: none"><li>S.M. Computer Science GPA: 3.875</li><li>A.B. Physics with Advanced Standing, Secondary in Mathematics GPA: 3.653</li><li>GRE: math 170/170 - verbal 161/170 - writing 5/6</li></ul>	<b>Harvard University</b>	<b>Fall 2014 - May 2018</b>
<b>Rome, Italy</b> <ul style="list-style-type: none"><li>French Baccalaureate, GPA: 20.4/20.</li><li>Finalist in the French Math Olympiads, May 2013</li></ul>	<b>Lycée Chateaubriand French High School</b>	<b>Fall 1999 - June 2014</b>

## RESEARCH AND WORK EXPERIENCE

<b>Software Engineer</b> <ul style="list-style-type: none"><li>Contributed to development and open sourcing of ML.NET, ML library internally build by MSR for the past decade</li><li>Primarily focused on improving model explainability features of the library, and building a new API</li><li>Joined MSR project to explore the fine-tuning of classical ML models (e.g. decision trees) by converting them to neural networks and using backpropagation</li></ul>	<b>Microsoft AI</b>	<b>August 2018 - Present</b>
<b>Undergraduate Researcher</b> <ul style="list-style-type: none"><li>Constructed and evaluated latent variable model for neural machine translation relying on conditional VAE</li><li>Explored recent text generation method to generate news articles headlines by editing prototype sentences</li><li>Participated in small seminar with Prof. Rush on recent NLP techniques for text generation, reading and presenting papers</li></ul>	<b>Harvard NLP Group</b>	<b>Fall 2017 - Spring 2018</b>
<b>Software Engineer, intern</b> <ul style="list-style-type: none"><li>Reduced impact of load operations in Azure distributed database SQL Data Warehouse, through on demand construction of new cluster of compute nodes for bulk load operations, this also improved compression quality</li></ul>	<b>Microsoft</b>	<b>May - August 2017</b>
<b>PRISE Research Fellow</b> <ul style="list-style-type: none"><li>Co-authored three patents on a new method to optimize and automate the design of the layout of Printed Circuit Boards</li><li>Elaborated a new highly parallelizable representation of the problem and developed a heuristic algorithm based on that</li><li>Reached and sometimes improved the performance of current designs</li></ul>	<b>Harvard - Cadence Design Systems</b>	<b>June - August 2016</b>
<b>Analyst, intern</b> <ul style="list-style-type: none"><li>Assessed companies' distressed assets and debt, analyzed long term effects of bankruptcy and credit restructuring</li><li>Received training on options (independently studied Options Swaps and Other Derivatives, Hull)</li><li>Autonomously started developing an algorithm to assess options' pricing offset with respect to their theoretical value</li></ul>	<b>Lonsin Capital Hedge Fund</b>	<b>May - June 2015</b>
<b>Marketing, intern</b> <ul style="list-style-type: none"><li>Participated to the organization of a new sponsorship deal for the Chinese National Swimming Team, selected English name for new car models, and produced social responsibility reports</li></ul>	<b>Geely Auto, Chinese Owner of Volvo</b>	<b>July - August 2015</b>

## TEACHING AND LEADERSHIP

<b>Teaching Assistant</b> <ul style="list-style-type: none"><li>Directed weekly sections for 20 students, held office hours, graded problem sets and advised groups on final projects</li></ul>	<b>Harvard Computer Science 1</b>	<b>Spring 2017 - Spring 2018</b>
<b>Director of FIP, Alumni Chair</b> <ul style="list-style-type: none"><li>Director of FIP (Freshmen International Preorientation), a 5-day Harvard Orientation for 150 international students</li><li>Coordinated a team of 40 leaders, selected among 120 applicants, for the organization of the program</li><li>Initiated a SIG (Shared Interest Group) for international alumni, a club recognized by the Harvard Alumni Association</li></ul>	<b>Harvard Woodbridge International Society</b>	<b>Spring 2015 - Fall 2016</b>
<b>President</b> <ul style="list-style-type: none"><li>Invited prominent European political figures and representatives of major businesses to give presentations; in particular Josep Borrell, former President of the European Parliament and Alberto Festa, CEO of Bulgari</li></ul>	<b>Harvard European Business Group</b>	<b>Fall 2014 - Spring 2017</b>

## SPORTS

<b>Varsity Team</b> <ul style="list-style-type: none"><li>Starter on Harvard Fencing Varsity Team, 2015 Ivy League Champions</li></ul>	<b>Fencing</b>	<b>Fall 2014 - Spring 2016</b>
<b>Italian National Team</b> <ul style="list-style-type: none"><li>Member of the Italian National Pentathlon Team leading it to first victory at the International Budapest Competition 2012</li><li>Ten years of competitive activity, with last four years of solo training</li></ul>	<b>Modern Pentathlon</b>	<b>Summer 2012</b>

## SKILLS AND INTERESTS

- Languages: Italian, French - native; German - intermediate; Chinese - beginner
- Proficient in Python, C/C++, C#, Java, Mathematica, OCaml and SQL