# Florentin Guth

#### Personal Data

Date of Birth: 20 February 1997

Address: 45 rue d'Ulm, 75005 Paris, France

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#### EXPERIENCE

MARCH-JUNE 2018 | Research intern at FACEBOOK AI RESEARCH, New York, USA.

Application of a version of Counter-Factual Regret Minimization for the movement of units on a medium scale for the real-time strategy

video game StarCraft.

Under the supervision of Gabriel Synnaeve and Nicolas Usunier.

JUNE-AUGUST 2017 | Research intern at ETH ZÜRICH, Switzerland.

I developed a tool able to infer automata describing contract interactions on the *Ethereum* blockchain. We have an ongoing submission at the ESEC/FSE conference.

Under the supervision of Dr. Valentin Wüstholz and Pr. Peter Müller.

#### **EDUCATION**

2017–2019 | Master degree in Computer Science, ÉCOLE NORMALE SUPÉRIEURE, Paris, France. (ongoing)

2016–2017 | Bachelor degree in Computer Science, École Normale Supérieure, Paris, France.

With highest honors, GPA 4.00 (18.33/20). Complete list of courses and grades.

2014–2016 | Classe préparatoire, Lycée du Parc, Lyon, France.

With highest honors.

Intensive undergraduate courses in Mathematics, Physics, and Computer Science.

2011–2014 | Baccalauréat, Lycée Léon Blum, Le Creusot, France.

With highest honors, specialized in Mathematics.

#### SKILLS

Programming languages Proficiency in Python, OCaml, C/C++, Go

Computer Science Machine Learning, Convex Optimization, Signal Processing, Compilation...

Mathematics Probabilities, Statistics, Integration, Functional Analysis...

Communication LATEX, Microsoft Office

#### Prizes and Contests

2017 67th (out of 3,000) in "Innovation" of the Ludum Dare 40 game jam with "Stealing Cubes"

2017 11th of the french national algorithmic contest Prologin

2016 29th of the french national algorithmic contest Prologin

2015 39th of the french national algorithmic contest Prologin

2013 3rd of the Mathematics Olympiads of Dijon, France

2010 1st of the "Rallye des Mathématiques" of Saône-et-Loire, France

2009 1st of the "Rallye des Mathématiques" of Saône-et-Loire, France

2008 3rd of the "Rallye des Mathématiques" of Saône-et-Loire, France

2003 3rd of the "Fête du Livre de la ville du Breuil" short story contest

#### LANGUAGES

French: Mother tongue

ENGLISH: Fluent GERMAN: Technical

#### Interests and Activities

Music Piano, keyboard percussions, doublebass, drums, singing

Bridge France champion (under 18, by pairs) 2013

Sport Running, climbing

## Bachelor degree in Computer Science

### List of courses

Course	Grade (out of 20)	ECTS
Algorithmics and Programming	19	9
Formal Languages, Calculability and Complexity	15.5	9
Programming Languages and Compilation	18.5	9
Digital Systems	19	9
Systems and Networks	17.7	9
Information and Coding Theory	19	12
Introduction to Cryptography	16.25	9
Computer Science through Practice	18	9
Signal Processing	16.5	9
Random Structures and Algorithms	17	9
Semantics and Application to Program Verifying	16.75	9
Large Scale Machine Learning	16	2
Bachelor Internship	17	12
Integration and Probabilities	17.5	12
Algebra 1	19.5	12
Topology and Differential Calculus	19	12
Functional Analysis	17	12
Introduction to Computational Neurosciences	19.52	4
Introduction to Decision Theory	16.46	4
English Debating	14.9	6
British Humour	14.2	6
GPA and Total	4.00	184

## First-year Master's degree (1 semester only) in Computer Science

### List of courses

Course	Grade (out of 20)	ECTS
Machine Learning	18	9
Convex and Combinatorial Optimization	18	9
Introduction to Computer Vision	18	9
Network Models and Algorithms	$?^{1}$	9
Master's Internship	$?^1$	30
Stochastic Processes	18	12
Statistics	17	12
Harmony and Keyboard Harmonization	_2	6
GPA and Total	4.00	96

 $<sup>^1\</sup>mathrm{Mark}$ unavailable as of now  $^2\mathrm{Course}$  without final mark