

# Thibault Allançon

Computer science student

## Education

- 2017 – present **MSc in Computer Science**, EPITA, Paris  
Expected graduation: 2022.
- 2017 **Scientific Baccalauréat**, Paris  
With highest honors (specialization track: mathematics).

## Experience

### Employment

- Jun – Aug 2018 **Computer Scientist Intern**, HABX, Paris  
Generate architectural plans using computational geometry in Python, worked on custom Voronoi diagrams, automatic furnitures placing, scoring function to evaluate rooms quality.

### Community

- 2017 – present **Organizer**, PROLOGIN, Paris
- Finalist in 2015 and 2016 of the French national programming contest Prologin.
  - Redaction of algorithmic problems and exercises for the qualification round and semi-final.
  - Creation of the custom-made game environment for the final.
- 2018 – present **Trainer**, FRANCE-IOI, Paris
- Finalist of France-IOI contest Algoréa 2014.
  - France-IOI is an association providing computer science formation to middle and high school students, to select the French team for the International Olympiad in Informatics (IOI).
- 2018 – present **Organizer and trainer**, GIRLS CAN CODE!, Paris  
One-week programming summer school for middle and high school girls. Our goal is to close the gender gap in computer science, by allowing girls to discover the field in a fun and safe environment.

## Skills

### Technical

Programming C, C++, Python, Rust, Caml Systems GNU/Linux, macOS, Windows  
Bash, L<sup>A</sup>T<sub>E</sub>X

Tools vim, git, make, i3, tmux

### Languages

French Native speaker English Fluent (TOEIC: 970)

## Programming experience

- Personal projects
- 🔗 **Small x86 operating system**, C, asm  
A simple and experimental x86 operating system.
  - 🔗 **Re-implementation of Git version control**, Rust  
Implementation of Git internals: objects/index storage, branching, merging, remotes.
  - 🔗 **Creation of Prologin 2018 finals game**, C++  
Candidates are asked to create an AI in 36 hours for this specific game.
  - 🔗 **Implementation of machine learning algorithms**, Matlab  
Neural network, linear/logistic regressions, SVM, K-means.
  - 🔗 **Emulation of an entire computer**, C  
Emulated hardware parts, creation of a small operating system and a custom compiler.
  - 🔗 **Minimal Lisp-like programming language**, C  
Supports variables, conditionals, functions, error handling, custom expressions.
- School projects
- 🔗 **Optical character recognition software**, C  
Responsible for the neural network implementation, training, image processing and segmentation.
  - 🔗 **Civilization-like 3D multiplayer game**, C#/Unity  
In charge of hexagonal map rendering and procedural generation, enemy AI, core gameplay mechanics.