# Benjamin Najib

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#### **EDUCATION**

#### Carnegie Mellon University

Pittsburgh, PA

Bachelor of Science in Information Systems and Computer Science, GPA: 4.00 Relevant coursework:

Aug. 2024 - May 2028

15-122: Principles of Imperative Computation, 21-127: Concepts of Mathematics,

15-112: Fundamentals of Programming and Computer Science, 21-120: Differential and Integral Calculus

#### La Doctrine Chrétienne High School

Strasbourg, France

Specialties: Mathematics, Physics-Chemistry, Engineering Sciences, GPA: 4.00

Sep. 2021 - June 2024

### EXPERIENCE

## Artificial Intelligence Research Assistant

Aug. 2023 – Aug. 2024

 $Department\ of\ Soil,\ Water,\ and\ Ecosystem\ Sciences\ of\ the\ University\ of\ Florida$ 

Remote

- Developed a water forecasting AI model with N-Beats
- Reported loss performances comparing different optimizers including AdaBelief
- Collected, treated and analyzed hydrological datasets

# Information Technology Consulting Intern

Oct. 2023

Komposite

Paris, France

- Fine-tuned a custom LLM with a dataset curated for employees with 7B+ parameters
- Explored entreprise-level database management solutions for clients

#### **Electrical Engineering Intern**

June 2022

Electrical Engineering Department of the National Institute of Applied Sciences

Strasbourg, France

- Developed in a team environment a robotic bottle holder using AutoCAD and an Arduino system
- Troubleshooted and soldered on electronic systems

# PROJECTS

# Evolution Simulator | Python, Numpy, Matplotlib, CMU Graphics

Nov. 2024 - Dec. 2024

- Developed an educational interactive simulation of Darwinian evolution using stochastic models
- Implemented machine learning techniques for determining species environment fitness

## PlushieRun | Python, CMU Graphics

Nov. 2024

- Developed in a team environment an action-adventure video game with map generation algorithms
- Placed in exposition for Hack112 course-wide hackathon

#### AWARDS AND EXAMINATIONS

Mathraining Feb. 2022 – June 2024

International Remote

- 87<sup>th</sup> percentile on Belgian International Mathematics Olympiad training platform with 12K+ ranked users
- Highest scores in Number Theory and Algebra

SAT
June 2023
International
Bordeaux, France

• Scored 1560/1600, 99<sup>th</sup>+ percentile

• 790/800 in Math, 770/800 in Evidence-Based Reading and Writing

## TECHNICAL SKILLS

Languages: Python, C/C++, HTML/CSS

Developer Tools: Git, Vim, VS Code, Google Colab

Libraries: pandas, NumPy, Matplotlib