

# Jad Chamseddine

FINAL-YEAR DUAL DEGREE STUDENT IN MATHEMATICS & COMPUTER SCIENCE

92170 Vanves, France

☎ (+33) 7 82 52 14 40 | ✉ jad.chamseddine@etu.sorbonne-universite.fr | 🌐 jchamseddine | 📄 Jad Chamseddine

## Education

### Sorbonne Université (ex UPMC)

Paris, France

DUAL BACHELOR'S DEGREE IN MATHEMATICS AND COMPUTER SCIENCE

2023 – Expected 2026

- Coursework: Measure Theory & Probability, Algorithms, Data Structures, Linear Algebra, Database Systems, Numerical Analysis.

### Lycée Buffon

Paris, France

CLASSES PRÉPARATOIRES (MPSI) – INTENSIVE MATHEMATICS & PHYSICS (30+ H/WEEK)

2022 – 2023

### Lycée Blomet

Paris, France

FRENCH BACCALAUREATE, SCIENTIFIC TRACK – GRADUATED WITH HIGH HONOURS

June 2022

- Specialisation: Mathematics & Physics

## Research & Projects

### LIP6 Laboratory (Laboratoire d'Informatique de Paris 6), Sorbonne Université

Paris, France

RESEARCH INTERN – PROBABILISTIC GRAPHICAL MODELS

Feb. 2025 – June 2025

- Designed a T-order Dynamic Bayesian Network (DBN) using Python and pyAgrum.
- Developed custom inference algorithms for complex temporal dependencies.
- Optimized performance to mitigate combinatorial explosion in high-dimensional models.
- Applied measure theory and probability to validate model consistency.

### Personal Project – NLP & Quantitative Finance

GPU-ACCELERATED FINBERT FINE-TUNING

Jan. 2025 – Present

- Fine-tuned FinBERT on the Financial PhraseBank dataset (100% annotator agreement) for financial sentiment classification.
- Optimized training pipeline for local GPU execution on an NVIDIA RTX 3060 (fp16 mixed precision, gradient accumulation).
- Delivered 3-class sentiment classification (Positive / Negative / Neutral) using the HuggingFace Transformers stack.

### Data Structures course project, Sorbonne Université

Paris, France

CPU ARCHITECTURE SIMULATOR

March 2025 – June 2025

- Designed and implemented a functional CPU simulator modeling the fetch-decode-execute cycle and instruction set architecture.
- Developed low-level memory management and register simulation to ensure binary compatibility with custom assembly.
- Optimized execution logic in C to handle complex instruction flows and pipeline states.

## Personal Portfolio Management

### Active Equity Portfolio Management

ANALYSE ET MISE EN ŒUVRE DES CHOIX D'INVESTISSEMENT

2024 – Present

- Built a long-only thematic strategy focused on the Semiconductor & AI value chain.
- Conducted in-depth financial analysis on individual stocks (e.g., Advantest analysis leading to +100% realized return).
- Managed entry/exit on large-cap assets (NVDA, TSM) based on supply chain monitoring.
- Applied dual CS/Math background to evaluate GPU architectures and semiconductor manufacturing processes.

## Skills

- Programming:** Python (Pandas, NumPy, Matplotlib), C, SQL, Java
- Tools:** Git/GitHub, Jupyter Notebooks, LaTeX
- Languages:** French (Native), English (TOEFL 90/120 – B2), Spanish (Intermediate)

## Interests & Activities

- Market Analysis:** Macro trends & Financial press (Bloomberg, FT)
- Technology:** GPU computing (Graphics Processing Unit)
- Chess:** Top 2.3% on Chess.com
- Horology:** Watch enthusiast – innovation, craftsmanship & complications (Deadbeat Seconds)