Hasan AL AMEEN

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github.com/MA0100

Education

Mines Paris - PSL $2022 \rightarrow 2025$

Generalist Engineering, Spec : Advanced Probability and Geostatistics

Paris. France

• Relevant Coursework: Deep Learning, Mathematical Statistics, Game Theory, Quantum Computation, Stochastic Processes.

Lebanese University

 $2018 \rightarrow 2022$

Diploma in Computer and Communication Engineering (Rank: top 2%)

Beirut, Lebanon

• Relevant Coursework: Data Structures and Algorithms (C++), Operation Research, Algebra, Numerical Analysis, Statistics, Signal theory and processing.

Lebanese University

 $2020 \to 2022$

Pure and Applied Mathematics (L2 and L3), in-parallel with engineering program

Beirut, Lebanon

• Relevant Coursework: Measure and Integration Theory, Functional Analysis and Optimization, Probability Theory, Graph Theory, Group Theory.

Experience

Lexifi

April 2024 → August 2024

Software Engineer Intern

Paris, France

- Worked on optimizing the build system "dune" for Ocaml, which is used to construct an algebra for financial contracts and pricing.
- Integrated a new feature of ocaml's compiler with dune, resolving several open issues: add support for -H flag
- Skills : Ocaml, C, git, algorithms

Safran Tech

Sep $2023 \rightarrow March 2024$

Research Internship in Statistical Learning applied to Physics.

Châteaufort, France

- Investigating state-of-art deep learning architectures (transfomers, INRs, Boltzmann networks) tweaked to tackle problems in mathematical physics.
- · Implementation and testing on real datasets and simulated PDEs, with industrial use cases in accelerating design process.
- Skills: Python, research, deep learning, mathematics

Centre de Recherche d'Informatique - Mines Paris

Febraury 2023 → May 2023

Research Intern

Paris, France

- Used Coq to develop a formal implementation of the Dictatorship mechanism to prove that there is no cheating strategy.
- Applications in kidney exchange and auctions.
- Skills: Coq, algorithmic game theory, formal systems

Overall Skills

Languages: C, C++, Python, Ocaml

Technologies: Git, SLURM, Distributed Computing for Scientific Applications

Concepts Problem-Solving, Machine Learning, Algorithms

Dialect Arabic (Native), English (Advanced Proficiency), French (Professional Proficiency)

Achievements

- Finalist of the Fédération Française des Jeux Mathématiques comptition 2024.
- Won the 3rd place in the Art and Science fair, held at the Lebanese American University, 2017

Social Engagements

Cyber-Community Club - Lebanese University: Participated in workshops, attended and gave lectures on cryptography and ethical hacking

Sports-Engagements: Basketball, Football, Krav-Maga