Chanattan Sok

École normale supérieure de Rennes, 11 avenue Robert Schuman, 35170, Bruz, France

chanattan.sok@ens-rennes.fr | chanattan.github.io | Born on the 6th of August 2002

I am a second year master student in AI, MAS, and decision at Sorbonne University,
and at the same time a fourth-year student at École normale supérieure de Rennes.
I am seeking both a 6-month research internship starting February 2026,
and a PhD position in decision-making (aid)/recsys/RL/CS-economics.

Education

Master's degree in Algorithms, Artificial Intelligence, Interactions and Decision (AI2D) - Sorbonne University, Paris, France	Sept 2025 - June 2026

Coursework on decision-making (multi-criteria; in uncertainty; models), coordination and game theory in MAS, MARL, social choice, mechanism design and auction theory.

ENS Diploma in Computer Science - École normale supérieure de Rennes, France	Aug 2022 - Aug 2026
B.Sc. in Fundamentals of Computer Science - ENS Rennes & Univ. Rennes, France	Aug 2022 – Aug 2023

Research Positions

Research assistant at LIP6 (MAS team) | Sorbonne University, Paris, France.
Supervised by Nicolas Maudet, Aurélie Beynier, and Arianna Novaro.
Sept 2025 - February 2025
Report

(WIP) Investigated strategic manipulation within an iterative fair division model using a picking sequence, analyzing its convergence to equilibrium and the impact on social welfare.

keywords: mechanism design, vote, game theory

Student researcher at Anticor (Datalab) | Paris, France.
Work with Julien Perez, and Anticor lawyers.
Aug 2025 - 202X

Developed decision-making help architecture of multi-agent LLMs on user-given case studies: Mixture of Experts in law-specific reviewing with a final deliberative agent for decision.

keywords: LLM, deliberation

Research assistant at LAMSADE and CES | Paris Dauphine-PSL, CNRS, France.
Supervised by Jérôme Lang, Arianna Novaro, and Florian Sikora.
May 2025 - August 2025
Website, GitHub, *Article*

Developed a railway network tool to for fairness evaluation, with graph theory and social choice. Modelled some EU countries railway networks and proposed new fairness indices.

keywords: social choice, graph theory

Research fellow at City Science Lab HCU Hamburg, an MIT Media Lab collaboration and IRD in France | Hamburg, Germany.
Supervised by Arnaud Grignard and Rico Herzog.
Feb 2025 - May 2025
Slides, *Article*

Modelled an urban digital twin of Hamburg, focused on buildings CO2 footprints for policy decision-making help, in GAMA. Collaboration with the ministry of Housing and Ecology.

keywords: MAS, simulation, urban digital twin

Research assistant in the *Multi-Robot Systems* team | Inria & INSA Lyon, France.
Supervised by Olivier Simonin.
Sept 2024 - Dec 2024
Article

Developed a simulation platform for pedestrians' motion in Python and Mesa to simulate and resolve spatial conflicts between pedestrians based on social choice and game theory.
keywords: MAS, simulation, game theory, social choice, planning

Research assistant in *Programming Languages* | Aarhus University, Denmark.
Supervised by Magnus Madsen.
May 2024 - Aug 2024
GitHub

Extended the functional-first Flix language with Java interoperability, in Scala.

Proposed Java types' representations and their reduction in type resolving.

keywords: programming language design

Research assistant in the *Data Management team* | IRISA, Thales, France.
Supervised by Laurent d'Orazio.

Sept 2023 – May 2024
Article

Proposed a study platform in Rust for performance and time comparisons of Rust-native and Wasm-based join standalone operations in serverless/serverful environments.

keywords: Webassembly, Rust

Student research fellow in data management/AI | Anticor, ENS Rennes, France.
Work with Julien Perez, and Anticor lawyers.

Nov 2023 – May 2024
Press Paper

Created law-related database scheme to help lawyers find public market frauds.

keywords: mySQL, pandas, UX

Research assistant at LIP6 in *Multi-Agent Systems* | Sorbonne University, France.
Supervised by Nicolas Maudet and Aurélie Beynier.

May 2023 – July 2023
GitLab, Report

Developed a generic n-choice deliberation simulation platform where agents negotiate, influence and vote with ranked preferences – based on Putnam's two-level game theory.

keywords: MAS, simulation, deliberation, preferences, game theory

Teaching & Mentoring

- **Referring tutor and founder of the computer science and maths tutoring for bachelor students**, ISTIC - Univ. Rennes, Rennes, France — Sept 2023 - March 2024

- **Guest lecturer on negotiating multi-agent systems**, invited by Pr. Franz Kurfess - Calpoly University, San Luis Obispo, California. — Jan 2024

- **CPES (Cycle Pluridisciplinaire d'Enseignement Supérieur) science tutor in maths and computer science for first year bachelor students** - Lycée Châteaubriand, Rennes — Sept 2023 - March 2024

- **High-school tutor in maths and computer science** - Rennes — Sept 2023 - March 2024

- **Assistant professor in mathematics and physics for middle-school students** - Collège Évariste Galois, Paris. — Sept 2021 - March 2022

- **Private teacher in computer science for students of all ages** - Independent. — 2015 - 2024

Additional Experiences and Activities

Co-president of the oenology club, ENS Rennes	Sept 2023 - March 2024
Founder of Tutorat ISTIC, tutoring program for B.Sc. students, Univ. Rennes	Sept 2023 - March 2024
Finalist in ENS Rennes eloquence competition 2023-2024, ENS Rennes	2023
Winner of a local hackathon (Palm'Hackathon ISTIC 2023), Univ. Rennes	2023
Treasurer of RJMI Rennes 2023 - ENS Rennes	Oct 2022 - March 2023
Participant of the NEGOCLIM project for Economics & CS research, MITI - CNRS	2022 - 202X
Freelance developer - Java Swing/FX, and Python software development, Online	2015 – 2019

Languages

French (native), English (TOEIC 855/990), German (notions)