



Junhao Liu

UPC Math & Computer Science
Dual-degree student

LINKEDIN www.linkedin.com/in/liujunhao139/

E-MAIL liujunhao139@gmail.com

WEBPAGE liujunhao.com, blog.liujunhao.com

LOCATION Barcelona, Spain

ABOUT ME

I naturally convey enthusiasm, especially when engaged in learning, problem-solving, or communicating with others. When facing challenges, I approach them with patience and perseverance to drive projects forward—a skill reinforced by my experience caring for my two younger siblings and babysitting my niece.

Currently, I am eager to contribute to projects that expand my knowledge in Computer Science. With a strong mathematical mindset, I am particularly interested in AI, Big Data, algorithms, and other cutting-edge technologies.

LANGUAGE SKILLS

4-polyglot: Chinese (native), English (Cambridge C1-level), Spanish and Catalan (10+ years studying in Barcelona).

Self-learning French as a hobby (currently ~A2 level, 1100+ days of Duolingo streak).

HIGHLIGHTS & HOBBIES

- Participated in *Bojos per les Matemàtiques*, a selective math discovery program for teenagers, admitted among 30 students from over 1,000 applicants in Catalonia.
- My High School project, related to Physics teaching through videogames, was published in a book by the *Jornada Científica de Catalunya*, a science journal for teenagers.
- Decent piano-playing skills (continuously improving it).
- Mathematics, CS project development, and technical blogging at blog.liujunhao.com.

STUDIES

September 2023 – Present
(estimated finish date: Spring 2028)

 **UPC Polytechnic University of Catalonia**
 **CFIS Interdisciplinary Higher Education Center**

Dual-degree: *Degree in Mathematics & Degree in Computer Science*. It is provided by the CFIS faculty in UPC. The current average point in Computer Science is 8.82 (out of 10).

Coursework exposure includes:

M A T H	Multivariable calculus
	Combinatorics and probability
	Numerical methods: linear algebra & calculus
	Differential equations and Newtonian physics
C S	Geometry and algebra
	C++ data structures and algorithms
	MIPS and x86 assembly
	Microcontroller programming in C
	Database manipulation using SQL
	Network fundamentals

September 2021 – May 2023
High School: INS Ventura Gassol

Graduated from High School with an average point of 9.01 (out of 10), achieving a perfect 10 in Physics on the University Entry Exam (global entry grade: 12.39 out of 14).

RELATED EXPERIENCE

 **Software Engineer Intern (summer 2025)**

Implemented hardware-specific (RISC-V) kernel to their SDK, with integration to custom provider's ONNX library as an operator. Implemented efficient vectorized FFT algorithm based on RISC-V hardware. Learnt and implemented basic NVIDIA CUDA C++ software for research. Comfortable with Git and learnt about collaborative project management (GitLab, Merge Requests, unified code styles, etc.).

 **Web Developer (summer 2021)**

Developed a custom presentation and interactive menu website for a sushi restaurant from scratch using HTML, CSS, and JavaScript to fully meet the client's needs. Hosted statically on GitHub for cost efficiency and assisted with domain registration (nuevoaromakaori.com). The site dynamically retrieves data from a JSON file stored in a GitHub subdirectory to generate HTML table content.

OTHER LABORAL EXPERIENCE

1. **Apple retail store promoter:** 4 months of part-time job (during university studies). Assisted customers by answering their questions about Apple products and recommending the most suitable options.
2. **Restaurant waiter** (full-time, for a few summers, in different restaurants): handled phone calls and reservations, communicated with customers for dish recommendations, served dishes and prepared drinks.