

# GUILLERMO F. PARRA-LÓPEZ

Murcia, Spain

Mathematics & Computer Science | Quant Finance & AI

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## Professional Summary

High-achieving Double Bachelor's student in Mathematics and Computer Science at the University of Murcia (**18 Matrículas de Honor**). Specializing in Quantitative Finance, Stochastic Calculus, and Artificial Intelligence, with academic experience at the University of Oxford. Founder and President of the FIUM Finance Club, combining rigorous mathematical foundations with practical leadership and software development skills. Seeking high-impact roles at the intersection of Data, AI, and Finance.

## Core Competencies

### Quantitative & Finance

Stochastic Calculus BSM PDE

Risk-Neutral Valuation The Greeks

Binomial Trees (CRR) DCF

### AI & Development

Deep Neural Networks (DNNs)

Tensor Processing Units (TPUs)

SQL Server Architecture

### Soft Skills

Leadership Strategic Planning

Public Speaking

## Education

### Universidad de Murcia

B.S. in Mathematics

B.S. in Computer Science

Expected 2028

- 18 Matrículas de Honor** (Perfect 10.0 in subjects like Nonlinear Optimization, FinMath, DSA, Cryptography, etc.)

- Elected Member of the Faculty Board & Student Delegation (DELFI).

### University of Oxford

AI and Machine Learning Programme

Aug 2024

- Grade: 9.8 (83/85, A+) at Lady Margaret Hall.

## Languages

**Spanish:** Native

**English:** Full Professional (TOEFL iBT 97 - C1 Level)

**Chinese:** Elementary

## Experience & Leadership

### Founder & President | Club de Finanzas FIUM (UMU)

Feb 2026 – Present | Murcia, Spain

- Founded and lead the faculty's first finance club, fostering a community bridging computer science, mathematics, and financial markets.
- Organizing seminars, market analysis sessions, and networking events for students interested in quant finance and quantitative trading.

### Internal Student (Math of Financial Markets) | UMU

Sep 2025 – Present | Murcia, Spain

- Focused on the rigorous mathematical foundations of derivative pricing, transitioning from discrete-time models to continuous-time frameworks.
- Applying the Black-Scholes-Merton PDE and engineering multi-step Binomial Trees to analyze convergence toward Geometric Brownian Motion.
- Evaluating portfolio risk and hedging efficiency through quantitative risk analysis using "The Greeks" (Delta, Gamma, Vega, Theta, Rho).

### Internal Student (DITEC - Deep Learning) | UMU

Sep 2024 – Sep 2025 | Murcia, Spain

- Researched the efficient processing and performance analysis of Deep Neural Networks (DNNs) within the Department of Computer Engineering.
- Conducted hands-on experimentation and optimization using Tensor Processing Units (TPUs) to accelerate machine learning workloads.

### Developer & Server Administrator | MANCOS.ES

Jun 2021 – Sep 2024 | Remote, Spain

- Developed and maintained custom server-side scripts, managed SQL databases, and optimized backend performance for high-concurrency environments.
- Supervised staff operations, implemented strict security measures, and collaborated directly with the user community to deploy new features.

## Honors & Awards

### Regional Olympiads (2022-2025):

- 1st Prize** in Physics.
- 2nd Prize** in Biology.
- 7th Place** in Programming (two consecutive years).
- Accesit / Finalist** in Chemistry, Mathematics, and Philosophy.