Ivan Almer

+385 98 774 053 | ivan.almer@gmail.com | linkedin/in/ivan-almer | github.com/almer101

Education

Università Bocconi — Milan, Italy
Master of Quantitative Finance and Risk Management — Sep 2023 – present

University of Zagreb, Faculty of Electrical Engineering and Computing — Zagreb, Croatia
Master of Computer Science — Sep 2019 – Jul 2022

The Polytechnic University of Catalonia, Barcelona School of Informatics — Barcelona, Spain
Master of Innovation and Research (exchange semester) — Sep 2020 – Jan 2021

University of Zagreb, Faculty of Electrical Engineering and Computing — Zagreb, Croatia
Bachelor of Computer Science — Sep 2016 – Jul 2019

Experience

European Central Bank (ECB) - Market Operation Analysis — Frankfurt am Main, Germany
Market Operations Analyst — Oct 2022 – Jun 2023

- Conducted precise and complex analyses related to Targeted longer-term refinancing operations (TLTROs)
- Ensured timely delivery of the TLTRO III recalibration dossier (as decided by the Governing Council of the ECB in October 2022) by automating the analyses using Python and SQL
- Contributed to the automation of the process that ensured timely delivery of the Minimum Reserves Remuneration dossier (as decided by the Governing Council of the ECB in July 2023)
- Created a dashboard that enabled complete monitoring of TLTRO III time-dependent applicable interest rates

Trainee — Dec 2021 - Oct 2022

- Developed a script for the TLTRO III applicable interest rate calculation, which immensely sped up the existing process while also improving reliability
- Maintaining and improving internal market operations database
- Automating procedures and speeding up existing workflows

Agency04 - Mobile Development Team — Zagreb, Croatia
Junior iOS Developer — Jul 2018 – Feb 2021

- Ensured a delivery of a major project on a tight deadline while maintaining both code and application quality
- Contributed to multiple iOS applications

Projects

Option Pricing and Hedging under Jump-diffusion model | *Financial Mathematics* — Feb 2022 - Jun 2022

- Master thesis at the Faculty of Electrical Engineering and Computing
- Used Jump-diffusion process to model the price of the underlying asset
- Derived a function to price a European call option written on the underlying
- Mathematically showed that simulations can be used to price an option
- Examined the effects of the quadratic- and delta hedge to hedge the open position in an option

The Crane Problem | *Trigonometry, Calculus, Python* — Jun 2021

- Invented a problem to find a function of time that describes how to move the load along the arm of the crane such that it covers the shortest distance between the two arbitrary points
- Used Trigonometry and Calculus to develop a solution
- Used Python to test it and visualise it

Technical Skills

Tools: Microsoft Office, Git, Tableau, LaTeX, Visual Studio
Programming Languages: Python, SQL, R, Java, C/C++
Libraries: pandas, NumPy, Matplotlib
Languages: Croatian, English, German, Spanish