Codruț-Florin Ivașcu

Home : Bucharest, Romania

Email: ivascu_codrut@yahoo.com **Phone:** (+40) 0764210433

ABOUT ME

Passionate about Data Science, Finance, Machine Learning, Risk Management and Capital Markets.

WORK EXPERIENCE

[09/2022 – Current]

Senior Consultant - Risk Advisory

Deloitte

Member in Machine Learning Research Team

Developed various advanced machine learning models for credit risk assessment, including Probability of Default (PD) and Loss Given Default (LGD) models, Scorecards, and Early Warning Systems (EWS).

Designed and implemented A-IRB and IFRS9 compliant LGD models using Python and PySpark on AWS infrastructure for a major systemic UK bank.

Created web-based applications for Model Validation and Early Warning Systems using Streamlit and FastAPI, enhancing accessibility and user interaction.

Conducted Climate Risk modeling for a consortium of Nordic banks, providing insights into equity and credit spread impacts.

[01/2022 – Current]

University Research Assistent

Bucharest University of Economic Studies

Member in Money and Banking department

Published in top tier journals in finance

Reviewer and Editorial Assistant for The Review of Finance and Banking journal

[10/2021 – Current]

Associate Professor

Bucharest University of Economic Studies

Professor at Faculty of Finance and Banking

Lectures in financial engineering and economic modelling.

[02/2018 – 08/2022]

Quantitative Research Analist

Algotech Innovation

Conducted in-depth quantitative research on commodity markets (futures) and developed advanced pair trading algorithms using Python.

Involved in the complete lifecycle of model development, including data preparation, analysis, backtesting, and deployment, ensuring robust and profitable trading strategies.

Developed a robo-advisory application for automated trading, integrating with brokers to enhance trading execution efficiency.

Continuously monitored and refined trading models based on real-time market data, improving risk-adjusted returns and ensuring alignment with the hedge fund's investment objectives.

[10/2016 – 02/2018]

Junior Life Actuary

Uniqa Life S.A.

Responsible for actuarial calculation regarding life insurance and for reporting the analysis of financial indicators and results to the board of directors.

EDUCATION AND TRAINING

[2019 – Current]

Ph.D. in Quantitative Finance

Bucharest University of Economic Studies

Thesis: Machine Learning applied in Finance

[2020 – 2022]

Psychology and Pedagoy Module

Bucharest University of Economic Studies

Key courses: didactics, phycology, pedagogy, organizational management

[2017 – 2019] **Master in Quantitative Finance**

CEFIN, Bucharest University of Economic Studies

Thesis: Option pricing using Machine Learning

Key courses: stochastic calculus, advanced econometrics, statistics and probabilities

[2014 – 2017] **Bachelor in Finance**

Faculty of Finance and Banking, Bucharest University of Economic Studies

Thesis: Term structure modelling (stochastic approach)

Key courses: financial engineering, corporate finance, public finance, capital markets, money and banking

DIGITAL SKILLS

My Digital Skills

Microsoft Office | Python | SQL | EVIEWS | Web App Development | PySpark

PUBLICATIONS

Portfolio Management

Ivașcu, C. F. (2021). Option pricing using machine learning. Expert Systems with Applications, 163

Ivaşcu, C. F. (2022). Heuristic methods for stock selection and allocation in an index tracking problem. Algorithmic Finance, 9(3-4), 103-119.

Ivașcu, C. F. (2023). Understanding Dividend Puzzle Using Machine Learning. Computational Economics, 1-19.

Economic Modelling

Ivașcu, C. F., & Ștefoni, S. E. (2023). Modelling the non-linear dependencies between government expenditures and shadow economy using data-driven approaches. Scientific Annals of Economics and Business, 70(1), 97-114.

Ivașcu, C. (2023). Can Machine Learning Models Predict Inflation?. In Proceedings of the International Conference on Business Excellence (Vol. 17, No. 1, pp. 1748-1756).

Risk Management

Modelling Credit Risk in a Low Default Portfolio Setting with ML - in review - best paper at FIBA conference 2024

Ivaşcu, C. F., & Serban, D. (2023). Value at Risk estimation for non-gaussian distributions. Review of Finance & Banking, 15(2).

VOLUNTEERING

[2015 – 2019] **Business Development Officer** Student NGO Voluntari pentru Idei si Proiecte (VIP)

Econosofia Member and Alumnus. Organizer of Investment School project, 15th edition

[2014 – 2015] **Marketing and Research Officer** Student NGO DaAfaceri

Organizer of Actori la Bursa, Resume and BusinessIntro projects.

24.07.2024