

ACT

January 20, 2025

AMSTERDAM, NETHERLANDS

Quantitative Risk Analyst

Dear Hiring Manager,

About Me

In my previous role as a Software Developer at Diomedes-technologies, a high-frequency trading firm, I improved my skills in scientific programming and data analysis. I successfully parsed and analysed large datasets using Python and SQL, developed statistical models to derive key metrics, and implemented automated processes to enhance data quality and efficiency.

Prior to that, I learned how to code by developing a website for medical school graduates in Romania to help them prepare for their final exams. I built the front-end using JavaScript and React (Material-UI) and developed the back-end with Azure Functions (C#) and SQL. Additionally, I integrated Stripe to handle the payment system. The front-end code can be found at: https://github.com/rares1928/rezigo_v2.

My academic background includes a Ph.D. in Mathematics from the Mathematics Institute of the Romanian Academy, where I specialised in spectral and algebraic methods in the study of differential manifolds. I also attended several machine learning seminars where I understood the density of functions created by neural networks (with architectures that can have either only one hidden layer or multiple hidden layers) in the set of continuous functions.

Why ACT?

I am writing to express my interest in the Quantitative Risk Analyst position in Amsterdam. My motivation comes from my willingness to solve real-world problems as well as my desire to constantly improve. With my background in mathematics and experience in software development, I am excited about the opportunity to work as an analyst for ACT. I would love to put my problem-solving skills to the test by tackling challenges that arise in generating high quality predictive signals, as well as implementing these ideas. I also value collaboration and have experience working closely with various stakeholders to ensure the successful execution of projects.

Why Me?

My research experience has equipped me with strong analytical and problem-solving skills, while my previous role as a Software Developer provided hands-on experience in implementing my ideas and solutions. I am proficient in reading, understanding, and adapting ideas from the latest research papers. In a field that evolves as rapidly as software development, the ability to grasp and adapt to new breakthroughs is imperative. I have experience optimizing algorithms and building predictive models, which I am eager to apply in risk prediction and developing strategies to mitigate financial risks at ACT. Additionally, my curiosity and passion for data analysis, combined with a fast-learning mindset, make me eager to tackle complex challenges in a high-performance environment. I am confident that my blend of technical expertise, research experience, and passion for data analysis will allow me to contribute meaningfully to ACT's success, and I am eager to bring my skills to your dynamic team.

Sincerely,
Rareş Anghel-Stan