Intern Quantitative Finance (m/f/d)*

Location
Munich

Enhancement of valuation models for bespoke reinsurance contracts with market risk transfer

Munich Re Markets focuses on reinsurance of savings and retirements products, which transfer actuarial risks and financial guarantees to the reinsurer. For this purpose, the Modelling group designs and maintains a library of advanced actuarial and financial mathematical models. The valuation of our portfolio is administered throughout the contract lifecycle, requiring efficient and adequate simulation of several market risk factors (interest rates, equity indices, volatility, etc.) for a large number of policies. With all members having a strong academic background in mathematics, physics, or computer science, the Modelling group maintains a near perfect equilibrium between production and research.

Your job
- Familiarisation with the business and the valuation library (payoff profiles and stochastic processes)
- Implementation of variance reduction methods for Monte-Carlo simulation, with a particular focus on low-discrepancy sequences
- Analysis of convergence properties for the implemented methods on parts of our portfolio
- Documentation of the results and recommendation for further action

Your profile
- Studies in (financial) mathematics, physics, statistics, or computer science
- Knowledge of stochastic processes and Monte-Carlo simulation
- Knowledge of and experience in at least one object-oriented programming language (e.g. Java, C#, C++)
- Excellent analytical skills and high degree of motivation
- Knowledge of risk-neutral valuation (Black-Scholes and beyond) is a plus
- Fluent in spoken and written English and/or German

Students from countries outside the EU require a German residence-work permit.

About us
As the world's leading reinsurance company with more than 11,000 employees at over 50 locations, Munich Re introduces a paradigm shift in the way you think about insurance. By turning uncertainty into a manageable risk we enable fundamental change. Join us working on topics today that will concern society tomorrow, whether that be climate change, major construction projects, medical risk assessment or even space travel. Together we embrace a culture where multi-skilled teams dare to think big. We create the new and the different for our clients and cultivate innovation. Sounds like you? Push boundaries with us and be part of Munich Re. Our employees are our greatest strength. That’s why we offer them a wide range of benefits.

Unlock your potential
- Diversity, Equity & Inclusion: we embrace the power of differences and are convinced that diversity fosters innovation and resilience and enables us to act braver and better.
- Continuous Learning: we believe that continuous learning is a key differentiator and critical for building new skills and accelerating growth.
- Career Mobility: we actively support career mobility, and our strong global and regional presence offers a wealth of career growth opportunities for you.

Apply now!

*Munich Re not only stands for fairness with regard to its clients, it is also an equal opportunities employer. Severely disabled candidates will also be prioritized, if equally qualified.