Senior Quantitative Researcher — Systematic Investing (US)

Company: Two Sigma

Role family: QR | Seniority: Senior | Location: New York, NY (US)

Source (public posting): https://careers.twosigma.com/careers/JobDetail/New-York-New-York-United-States-Quantitative-Researcher-Experienced-Hire/12633

Cluster demand (ground-truth): {"QR": 0.7, "DS": 0.15, "QD": 0.1, "MLE": 0.05, "SWE": 0.0}

Reconstruction method: normalized sections + paraphrased responsibilities/qualifications for QA use.

ROLE SUMMARY
You will run the end-to-end research lifecycle to discover, test, and improve systematic investment models. This role demands rigorous scientific methodology, strong statistical intuition, and the ability to partner with engineers for scalable implementation.

KEY RESPONSIBILITIES
• Formulate hypotheses, build signals/features, and evaluate predictive power using large datasets.
• Design robust validation, including out-of-sample testing, ablations, and sensitivity analyses.
• Model risk and performance; understand how transaction costs and constraints affect results.
• Collaborate with engineers to implement research pipelines and deploy models responsibly.
• Communicate findings clearly; document research decisions and experimental outcomes.

REQUIRED QUALIFICATIONS
• Strong background in statistics, math, or machine learning applied to time series.
• Proficiency in Python and research tooling; ability to work with large datasets.
• Demonstrated track record of delivering research outputs that improved live or paper strategies.

PREFERRED QUALIFICATIONS
• Experience with portfolio construction and risk modeling.
• Experience building scalable research pipelines with engineering partners.