Ryan Gomberg

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Actuarial Exams

Exam P (Probability) *Passed November 2025*

Technical Skills

R, MATLAB, Python, Excel, LaTeX, GitHub, PowerBI, Power Query

Education

University of California, Irvine *Sept 2021 - Jun 2025*
BS in Applied and Computational Mathematics *(Obtained June 2025)*

- GPA: 3.54/4.0
- **Coursework:** Mathematical Machine Learning, Statistics for Data Science, Numerical Analysis, Mathematics of Finance, Fixed Income, Probability, Technical Writing, Mathematical Modeling

Experience

Mentor *Irvine, CA*
Math CEO *January 2024 - April 2024*

- Engaged with high school students in low-income, diverse areas in inquiry-based activities with a strong emphasis on mathematics and other topics in STEM
- Collaborated with other mentors in curating new activities and maintaining student involvement
- Led group activities and encouraged conversation through icebreaker questions, active listening, and by introducing new ideas
- Learned how to partition challenging concepts into smaller, digestible problems

Self-employed *San Diego, CA*
Private Tutoring *Sept 2020 - June 2021*

- Provided one-on-one instruction to middle and high school students to prepare for academic tests and improve academic performance in mathematics
- Prepared lessons and supplements to monitor and assess student progress
- Developed study strategies and time management skills depending on each student's needs and learning styles
- Demonstrated various problem-solving methods to allow better understanding of a concept
- Helped three students achieve their academic goal

Projects and Personal Initiatives

Pricing and Severity Modeling Project (R) *PDF File*

- Simulated a dataset in R to model policyholder characteristics and used Exploratory Data Analysis to verify and explore trends.
- Implemented GLMs and regression models to approximate claim frequency and average claim severity. Ran diagnostics for statistical significance and goodness of fit for each model.
- Interpreted both model archetypes individually as well as their combined effect on total losses, both conceptually and quantitatively.

Quantitative Analysis Project (Python) *PDF File*

- Given recent OHLCV price history data in the S&P 500, identified equity factors and reasonable Key Performance Indicators (KPIs) while providing reasons for their individual strengths and weaknesses.
- Employed time series analysis to test portfolio performance under a momentum factor.