Anton Yang

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SUMMARY

As an undergraduate in Actuarial Science and Statistics, my experiences have inspired my passion for data analysis and statistical modeling. Through my research work, I've discovered the significant potential of advanced statistical techniques in solving real-world problems. Pursuing graduate studies in statistics will allow me to learn more about this field and gain the knowledge needed to make meaningful contributions to research and industry.

EDUCATION

University of Missouri Columbia, MO
Expected Graduation: December 2025
Bachelor of Science, major in Statistics, major in Actuarial Science
GPA: 3.92/4.0
Minor: Information Technology.
Honors: University of Missouri Dean's List (four terms), Missouri Nobel Scholarship (2022)
Coursework: Applied Statistical Model 1, Advanced Mathematics, Differential Equation, Matrix Theory, Mathematical Statistics, Probability Theory, Statistical Inference, Statistical Software Analysis, Theory of Interest, Topology

PROFESSIONAL EXAMS

- Passed SOA Exam P (Probability) — December 2023
- Passed SOA Exam FM (Financial Mathematics) — January 2024
- Sitting for SOA Exam SRM (Statistical Risk Modeling) — May 2024

TECHNICAL AND LANGUAGE SKILLS

Proficient in programming: R, Python, Excel, SQL, C#
Language: Mandarin

RELEVANT EXPERIENCE

University of Missouri, Columbia, MO — August 2023 - Present
Research Assistant
- Developed and implemented a simulation model for the KENO lottery game, showing proficiency in R.
- Contributed to the correction of discrepancies in odds, enhancing the overall accuracy of KENO lottery.
- Contributed to the design and creation of a poster presentation, effectively presenting key findings.

University of North Carolina Charlotte, Charlotte, NC — May 2023 - August 2023`
Undergraduate Researcher
- Conducted extensive simulations using R programming language to develop optimal treatment statistical techniques.
- Explored various techniques, including Ordinary Least Squares, LASSO, and Kernel regression, to find the optimal treatment.
- Skillfully used High-Performance Computing (HPC) to run the extensive simulation and reduced the computational time by 60%.

PROJECT EXPERIENCE

Regression Analysis on Individualized Treatment Rules
- Built extensive simulation to randomly generate medical data that accurately depicts real-world data.
- Implemented Qian and Murphy's method on optimizing Individualized Treatment Rules.
- Explored various statistical learnings and dimension reduction methods such as PCA and Random Forest.

The Black-Scholes Model
- Developed comprehensive understanding of financial derivatives models: the Black-Scholes Model.
- Derive rigorous proof of the Black-Scholes Model and applied in practical applications.
- Collaborated with graduate student to refine modeling techniques and delta hedging.