# Anton Yang

1228 Shingle Oak CT, Troy, MO 63379 | (636) 579-7776 | anton794904@gmail.com

## SUMMARY

As an undergraduate in Actuarial Science and Statistics, I am interested in exploring data analysis and statistical modeling within actuarial practice. Through my coursework and research, I've been exposed to the practical applications of statistical techniques in addressing real-world issues. I am excited about the opportunity to apply my knowledge in an actuarial internship at Security Benefit, contributing to strategic decision-making and risk management in various industries.

## EDUCATION

**University of Missouri** Columbia, MO                                      Expected Graduation: May 2025
Bachelor of Science, major in Actuarial Science, major in Statistics                                 GPA: 3.92/4.0
Minor: Information Technology.
Honors: Winner of DataFest for use of Statistical Analysis, University of Missouri Dean's List
Coursework: Accounting, Applied Statistical Model, Mathematical Statistics, Probability Theory, Statistical Inference, Statistical Software Analysis, Theory of Interest

## PROFESSIONAL EXAMS

- Passed SOA Exam P (Probability)                                                            December 2023
- Passed SOA Exam FM (Financial Mathematics)                                                    January 2024
- Passed SOA Exam SRM (Statistical Risk Modeling)                                                    May 2024
- Sitting for SOA EXAM FAM (Fundamental of Actuarial Model)                                     November 2024

## TECHNICAL AND Soft SKILLS

**Programming Languages**: Excel, R, Python, SQL, NoSQL, C#
**Skills:** Analytical Thinking, Communication, Time Management, Organization, Quick Learner

## RELEVANT EXPERIENCE

**University of Missouri,** Columbia, MO                                               August 2023 - Present
*Research Assistant*
- Developed and implemented a simulation using R to predict probabilities and validate our mathematical computations.
- Utilize simulation results to optimize probability calculations, enhancing the precision of winning predictions for Base and Bullseye KENO games.
- Presented research findings at our school's research week, contributing to thought leadership and facilitating knowledge exchange within the gaming and statistics communities.

**University of North Carolina Charlotte,** Charlotte, NC                              May 2023 - August 2023`
*Undergraduate Researcher*
- Conducted extensive simulations using R programming language to develop and optimize statistical methods for personalized medicine.
- Explored various techniques like Ordinary Least Squares, LASSO, Kernel regression, and PCA to find the optimal treatment based on individual patient characteristics.
- Skillfully utilized High-Performance Computing (HPC) to expedite simulation runs, mitigating the curse of dimensionality and significantly reducing 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 ways to mitigate the curse of dimensionality 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.