DORIS (YUHAN) GAO

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EDUCATION

Carnegie Mellon University   Pittsburgh, PA
B.S. in Information Systems   Double Major in Statistics and Machine Learning   Minor in Computer Science
Dean's List All Semesters   GPA:3.76/4.0
Relevant Coursework: Fundamentals of Programming (Python), Imperative Computation (C), Machine Learning, Functional Programming (SML), Software Engineering, Probability (R), Differential Equations (TA), Linear Algebra

EXPERIENCE & PROJECTS

Math Finance Summer Undergraduate Research Program   Pittsburgh, PA
Research Analyst (Guided By Dr. William Hrusa)   June 2023 - July 2023
- Priced 5 exotic options under Black Scholes model, Binomial model & Geometric Brownian motion mathematically
- Built Python models to price exotic options and American options and tested with real stock data
- Delivered weekly news presentations on financial sectors including equities, rates, FX, and commodities

Fundamentals of Programming Final Term Project   Pittsburgh, PA
Programmer   December 2022 - December 2022
- Initiated and designed an interactive Subway Surfers Side Scroller Game in 3 weeks from scratch in Python
- Self-learned and implemented side-scrolling background, physical motion for surfer (gravity and projectile motion), and rectangular collision algorithms to detect collisions between surfer and coins and obstacles
- Coded 1000-line game involving randomly generated platforms & obstacles, a timer, death-free mode, revival mode

TA for Course Differential Equations   Pittsburgh, PA
Teaching Assistant   Jan 2024 - May 2024
- Led weekly recitations to review concepts and practice problems with over 30 students
- Held weekly office hours to answer questions on homework, helped students review for exams
- Helped students with concepts such as first order, second order, and higher order differential equations and modeling

LEADERSHIP & EXTRACURRICULAR EXPERIENCE

CMU ScottyLabs Club   Pittsburgh, PA
Tech Lead   August 2023 - Present
- Led a group of 50 students to meet weekly and work on developing a website to help CMU students find roommates
- Offered technical support to members and used JavaScript for the website https://github.com/ScottyLabs/roomies

CMU Smart Women Securities   Pittsburgh, PA
Research Board Analyst   January 2023 - Present
- Enrolled in a 10-week lecture series on financial literacy taught by invited speakers from financial institutions
- Updated and analyzed market trends weekly and delivered 3 stock pitches on TMT industry with committee members

CMU Chinese Students & Scholars Association   Pittsburgh, PA
Public Relationship Associate   August 2022 - Present
- Organized weekly internal and university-wide activities including Chinese New Year Gala drawing 200+ attendees
- Connected with sponsors to raise sponsorship over 1000 USD for major activities in the organization
- Organized a Career Info Session and invited 20+ alumni from Technology, Finance, and Consulting industries

Quant Club   Pittsburgh, PA
Member   January 2023 - Present
- Led a team of 6 to participate in Market Making Game and traded on contracts whose values are based on math and statistics problems to maximize terminal capital

SKILLS & INTERESTS

Technical Skills: Python, C, R, SML, LaTeX, Microsoft Office (Word, Excel, PPT), HTML, CSS, JavaScript
Languages: Native proficiency in English & Mandarin