CHARLES WALLACE
POSITION SOUGHT: AI / ML ENGINEER

OBJECTIVE

Graduate from the University of North Carolina with a Bachelor of Science in Mathematics, Chemistry, and Economics concentrating in Computational Chemistry and Quantitative Finance. Passionate about applying advanced computational and data analysis techniques to drive innovation in chemistry, finance, computer, data, and statistical sciences. Experienced in developing and optimizing multi-threaded Python applications, with familiarity in low-latency systems. Skilled in analyzing large datasets with machine and deep learning techniques. Excited to contribute to a team by leveraging a strong technical base, problem-solving skills, and an eye for performance to improve research and strategy.

EDUCATION

May 2024	**Bachelor of Science in Chemistry, Mathematics, and Economics**
	University of North Carolina
	Graduated with a triple major in four years with concentrations in computational chemistry and quantitative finance while making Dean's List. Conducted original research using High Performance Computing.

EXPERIENCE

2024 - Present	**Engineer | ClimateBook**
	Chapel Hill, North Carolina
	Developed quantitative models to dynamically update betting odds for a weather-focused wagering platform, incorporating live betting volume, historical trends, and forecasted user behavior. Built simulations to optimize profitability, ensure liquidity, and minimize exposure risk in a high-frequency betting environment.
2021 - 2024	**Head U.S. Powerboating Instructor | YMCA Camp Seagull**
	Arapahoe, North Carolina
	Managed the creation and instruction of course material while leading a team of six junior counselors in powerboat operation training for approximately 400 summer campers. Provided feedback on skill development for both campers and instructors.

ACCOMPLISHMENTS AND SKILLS

- **Quantitative Analysis & Research:** Conducted original research using simulations to model atomic systems and financial markets.
- **Financial & Data Analysis:** Experienced in using Python and Linex/Unix for financial modeling, deep learning with Tensorflow, and high-performance and research computing with Slurm.
- **Technical Skills:** Proficient in research computing, quantitative finance, and spectroscopic techniques, including 2D-NMR. Familiar with R, CVXPY, C++, SQL, NumPy, pandas, and Scikit.
- **Communication:** Four-time state championship forensics team member with individual championship in extemporaneous speaking
- **Leadership:** Eagle Scout and Senior Patrol Leader with Boy Scouts of America and U. S. Coast Guard OUPV Captain, demonstrating strong leadership and team management skills.