CHASE GILLIS

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EDUCATION

NEW YORK UNIVERSITY, *New York, NY | Madrid, Spain*   Sep 2021 - May 2025
Bachelor's Degree in Computer Science, Minor in Data Science
- Dean's List (3 Semesters), IAAC Student-Athlete All-American, Sommer's & Florida Bright Futures Scholarships Recipient
- Coursework: Algorithms, Stats, Data Structures, Linear Algebra, Calc II, Causal Inference, Discrete Math, Data Analysis, Econ
- Organizations: Zeta Psi Fraternity (President), Tech@NYU (Project Lead), Google Developer Student Club (Marketing Director), Quant Finance Society, Tech Treks, Bugs@NYU, NY Dance Marathon, P2B1 First-Gen Students, Varsity Wrestling, Stern Rugby

EXPERIENCE

U.S. CENTURY BANK, *Software Engineer & Data Scientist*   May 2024 - Present
- Designed a profitability model using SQL, Python, and Power BI to rank accounts, advising changes, boosting revenue by 10%
- Developed a cybersecurity system for file integrity verification through hash comparisons, detecting tampering in ~1% of files
- Automated Python archival system, relocating files older than 7 years, freeing 1 TB of disk space, and improving efficiency 30%

JPMORGAN CHASE & CO. VIRTUAL EXPERIENCE PROGRAM, *Quantitative Researcher*   Jul 2024 - Aug 2024
- Built a natural gas price forecast model, merging linear and sinusoidal regression for trend visualization, achieving 90% accuracy
- Priced a commodity storage contract by analyzing trading schedules, fees, and cash flow, increasing contract value by 10%
- Estimated default probabilities and bucketed FICO scores using logistic regression and MSE, improving risk assessment by 10%

NYU 404 FITNESS, *Supervisor & Data Scientist*   Sep 2022 - Aug 2024
- Refined gym hours and staffing with Python and pandas, improving our efficiency by 20% and aligning with budget constraints
- Reduced theft by ~75% through a strategic anti-theft campaign involving improved signage, rotation timing, and staff relocation
- Led a team of 50 attendants as the youngest supervisor, managing hiring, training, scheduling, and enforcing operational policies

SCALE AI, *Software Engineer - AI Consultant*   Jan 2024 - Apr 2024
- Reviewed AI-generated code in various languages for compliance with company standards, ensuring quality and accuracy
- Enhanced AI model performance by implementing efficient algorithms, improving content generation accuracy by ~12%

PROJECTS

BITCOIN FORECAST LSTM MODEL   Jul 2024 - Aug 2024
- Built an LSTM model to predict Bitcoin prices with 85% accuracy, ranking in the top 25% of Trilemma Capital tournament
- Trained and optimized the model on historical closing prices using Adam optimizer and MSE loss function over 100 epochs

PAIRWISE TRADING ALGORITHM & ENGINE   Jun 2024 - Jul 2024
- Developed a backtesting engine using Alpaca API and Streamlit, achieving a Sharpe Ratio of 1.48 and 5% weekly returns
- Created visualizations for price ratios, moving averages, and z-scores; achieved Sharpe Ratio of 1.48 with consistent returns

PRECEDENT PARSER   Oct 2023 - Dec 2023
- Led a team to develop a web scraper and website using Python and HTML/CSS, streamlining legal research for case precedents
- Utilized OpenAI and ScrapeOPS APIs to fetch data, providing citations, summaries, probabilities, and strategic insights for cases

ADDITIONAL INFORMATION

Programming Languages: Python (Pandas, Sklearn), C/C++, Java, x86 Assembly, SQL, JavaScript/HTML/CSS
Tools & Frameworks: AWS, Power BI, Excel, Bash, Git, Streamlit
Certificates: Machine Learning on AWS, Bloomberg Market Concepts, Lyft Software Engineering Forage, CPR, AED
Languages: English (Native), Spanish (Conversational)
Interests: Wrestling (State Champion, 5x All-American, 2 Team State Titles), Chess, Poker, Yoga, Fishing, Spikeball, Motocross