

Education

Brown University

DATA SCIENCE, M.Sc.

- Computational Probability and Statistics, Deep Learning, Software Security and Exploitation...

Providence, RI

Sep. 2022 - May. 2024

Minerva University

COMPUTATIONAL SCIENCES & BUSINESS, B.Sc.

- (Triple Majors) Data Science and Statistics, Applied Problem Solving, Strategic Finance
- Capital Allocation and Value Creating Growth, Global Enterprise Financial Strategy, Accounting...
- Data structure, Linear optimization, Machine learning and decision making, Bayesian statistics...

GPA 3.8/4(Top 5%) - Worldwide

Sep. 2018 - May. 2022

Skills

Programming Python, PHP, SQL, C/C++, R, MatLab

Web HTML/CSS/JavaScript, React.js, Bootstrap, jQuery, Flask, Django

Tech Stacks Burp Suite, TensorFlow, Docker, *nix, Pandas, Scrappy, Frida

Tools Heroku, MS Office, PhotoShop, Git, LaTeX, Jupyter, Unity

Languages English (Fluent), Mandarin (Native)

Tech experiences

Elle Investments

(INTERN)FULL STACK WEB APPLICATION DEVELOPMENT FOR HIGH BANDWIDTH TRADING DATA SOLUTION

- Overhauled a low-level persistent storage saving 20% write time, 40% read time, and 45% RAM
- Fixed SQL injection vulnerabilities and redesigned MVC+OOP stateless deployment framework, ensuring security
- Implemented dynamic HTTP cache that increased concurrency by 1000x, improving user experience

Remote, US

May. 2022 - PRESENT

The IBM Qiskit Quantum Computing

QUANTUM MACHINE LEARNING LAB EXPERIENCES ON CUTTING EDGE MODELS

- Experimented(scored 100%) various Quantum Machine Learning algorithms on IBM Quantum platform
- Explored Quantum Approximate Optimization algorithm and applications
- Analyzed Quantum Boltzmann Machines and Quantum Generative Adversarial Networks

Remote

July 2021 - Aug. 2021

Correlation between Fama-French factors and business cycles

SECOND-AUTHOR WITH DR. ARNAV SHETH(MIT) ON A PAPER ABOUT CURVE INVERSION TIMING STRATEGY

- Implemented a probit-based recession prediction model with 70% accuracy and realized 10% annualized return
- Validated correlation between FF factors and business cycles with ex-ante and ex-post analysis

Remote

June 2021 - PRESENT

Quantitative trading PaaS

FULL-STACK DEVELOPMENT FOR AN EVENT-DRIVEN QUANTITATIVE TRADING SIMULATION

- Implemented benchmark tools based upon ARIMA and Prophet
- Designed UI&UX with quantified alpha/beta testing, improving user experience
- Proposed low latency APIs that allow high frequency trading via HTTP

Remote

Sep. 2020 - PRESENT

Shunzhi Tech Inc.

(INTERN)PROJECT MANAGER & DEVELOPER FOR A CHANGE DETECTION MODEL ON VHR SATELLITE PICTURES

- Implemented real-time video stream object detection framework with 34% improvement than benchmark
- Deployed results to heterogeneous computing units from multiple service providers, saving 20% cost

Nanjing, China

Jun. 2020 - Sep. 2020

Finance Projects

Chongqing International Trust

(INTERN)ASSET MANAGEMENT ASSISTANT FOR QUANTIFIED FINANCIAL PRODUCT RESEARCH

- Diagnosed project finance risks based upon macroeconomics policies
- Examined consumer investment strategies under different assumptions through quantitative research
- Analyzed and validated Snowball derivatives using Monte Carlo knock-in/out options

Wuxi, China

July. 2021

Addor Capital

(INTERN)INVESTMENT ASSISTANT FOR SERVICE INDUSTRY RESEARCH AND INVESTMENT STRATEGIES

- Prepared, recorded, analyzed, and presented findings from in-person and virtual interviews
- Identified fraud risks with in-depth research report before financial due diligence
- Quantified and analyzed Cyber Range industry performance using DCF and linear regression

Nanjing, China

May. 2021 - Jun. 2021

ESG fund voting pattern research(published)

DATA PREPROCESSING AND ANALYSIS WITH ARNAV SHETH AND GITA RAO(MIT SLOAN)

- Designed a multi-thread crawler to acquire voting records from SEC EDGAR database
- Filtered and analyzed data using regular expression, creating efficient and universal data pipeline

Remote

Feb. 2021 - Mar. 2021