

Education

Brown University

DATA SCIENCE, M.Sc.

Providence, RI

Sep. 2022 - May. 2024

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

Minerva University

COMPUTATIONAL SCIENCES & BUSINESS, B.Sc.

GPA 3.8/4(Top 5%) - Worldwide

Sep. 2018 - May. 2022

- (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...

Skills

Programming	Python, C, PHP, SQL, R, MatLab
Web	HTML/CSS/JavaScript, React.js, Bootstrap, jQuery, Flask, Django
Tech Stacks	Burp Suite, Kernel, TensorFlow, Docker, *nix, Pandas, Scrappy
Tools	Heroku, MS Office, PhotoShop, Git, LaTeX, Jupyter, Unity
Languages	English (Fluent), Mandarin (Native)

Tech experiences

Brown Secure Systems Lab

Providence, US

(RESEARCH) PER-PROCESS SYSTEM CALL FILTERING AND KERNEL DEVELOPMENT

Jan. 2023 - PRESENT

- Developed log time syscall filtering program with seccomp BPF
- Customized Linux kernel 6.0.8 for arity-based filters
- Designed versatile syscall handlers for policy-bearing binaries

Elle Investments

Remote, US

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

May. 2022 - PRESENT

- 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

The IBM Qiskit Quantum Computing

Remote

QUANTUM MACHINE LEARNING LAB EXPERIENCES ON CUTTING EDGE MODELS

July 2021 - Aug. 2021

- 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

Correlation between Fama-French factors and business cycles

Remote

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

June 2021 - PRESENT

- 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

Shunzhi Tech Inc.

Nanjing, China

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

Jun. 2020 - Sep. 2020

- 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

Finance Projects

Chongqing International Trust

Wuxi, China

(INTERN) ASSET MANAGEMENT ASSISTANT FOR QUANTIFIED FINANCIAL PRODUCT RESEARCH

July. 2021

- 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

Addor Capital

Nanjing, China

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

May. 2021 - Jun. 2021

- 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

ESG fund voting pattern research(published)

Remote

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

Feb. 2021 - Mar. 2021

- 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