

Horace Liu

horace.liu@stonybrook.edu • linkedin.com/in/horaceliu • github.com/horaceliuh1

EXPERIENCE

Interactive Brokers Group <i>Software Engineer Intern (DevOps Team)</i>	Greenwich, CT June 2021 – Aug. 2021
<ul style="list-style-type: none">Engineered an internal code search engine and implemented “git blame” and Kafka alerts in Python<ul style="list-style-type: none">Wrapped as an image through Podman and managed by utilizing the Kubernetes DevOps clusterIndexed 8K+ repositories and 500K+ files into Elasticsearch from Gerrit REST API and PythonCreated a REST service, exposing a PL/SQL function to retrieve stock data in Java Spring MVCExposed vital flaws in IBKR’s proxy server design after using 2M+ requests to continuously crash them	
Stony Brook University (LUNR Lab) <i>NLP Research Assistant</i>	Stony Brook, NY Feb. 2021 – present
<ul style="list-style-type: none">Assisted Yash Lal with NLP Ph.D. research into why question answering and dataset creationExtracted and found correlations for 31K+ entries between human and automatic metrics in PythonDeveloped classification task between implicit and explicit questions, increased answer accuracy by 5%Executed Slurm commands to test and finetune models such as HuggingFace’s T5, ConceptNet, etc.	
Investment Club at Stony Brook <i>Vice President</i>	Stony Brook, NY June 2020 – present
<ul style="list-style-type: none">Collaboratively hosted a job fair networking event involving 23 employers and 88 students/alumniBestowed over 60 members (50% increase) with lectures, competitions, and guest speakersCreated Buffett’s Summit competition from React.js; resulted in positive reviews from 95% of membersManaged general body meetings, website overhauls/management, SEO, and external collaborations	

EDUCATION

Stony Brook University <i>Bachelor of Science in Computer Science and Economics</i>	Stony Brook, NY Expected Graduation May 2023
<ul style="list-style-type: none">GPA: 3.9; Dean’s List; University Scholars ProgramTeaching Assistant for ECO 108: Introduction to EconomicsWinner of the HackHealth 2021 hackathon in Social Good with 206 participants and 43 teams	

PROJECTS

Spark App (linktr.ee/usesparkapp)	June 2021 – present
<ul style="list-style-type: none">Devised product and led a team of 3 engineers and 1 designer using Agile development methodologyAdministered A/B testing and monitored app metrics, utilized results to increase user satisfaction by 30%Engineered product roadmap, modularized React Native front end, and implemented Firebase functionsSpearheaded app launch (App Store/Google Play) and marketing to over 14K students and 350 users	
Bitcoin Time Series Predictor (git.io/JLO42)	Dec. 2020
<ul style="list-style-type: none">Utilized LSTM, Prophet, and ARIMA models within Python to predict the price of Bitcoin<ul style="list-style-type: none">Designed as a teaching tool for a lecture series in algorithmic trading for Investment ClubEmployed NumPy, Pandas, Keras, Matplotlib, TensorFlow, and Scikit-learn in Jupyter Notebook	

Other projects: buffetts-summit.com (Jan. 2021); reinvest.life (Dec. 2020); covidlivedash.tech (Sept. 2020)

SKILLS

Technical Languages: Java; Python; JavaScript; TypeScript; HTML/CSS; SQL; R

JS Frameworks: React; Express; Node; React Native; Bootstrap; Axios; GraphQL

Python Libraries: NumPy; Pandas; Matplotlib; Seaborn; TensorFlow; Scikit-learn; PyTorch

Databases/Tools: Firebase; MongoDB; MySQL; ELK stack; Kubernetes; Podman; Docker

Languages: Fluent in English; Conversational Proficiency in Mandarin and French