NICHOLAS TRUONG

nicholas.truong@utexas.edu

EDUCATION

The University of Texas at Austin   Spring 2020
– Bachelor of Science, Computer Science Honors (Turing Scholars)
– Bachelor of Science, Mathematics
– Bachelor of Business Administration, Business Honors
– Overall GPA: 3.8

WORK EXPERIENCE

Coatue Management   June 2018 – August 2018
Data Science Intern, New York, NY

– Analyzed exhaust/alternative data to predict metrics strongly linked to company and industry performance
– Modeled key performance indicators that influence share price yielding profitable trades on surprise relative to consensus
– Created web-based user interface for tagging data, streamlining data validation and simplifying quality assurance

Building Wide Intelligence Lab   May 2017 – May 2018
Research Assistant, Austin, TX

– Implemented image-based object detection in C++ to help robots learn relative object locations
– Constructed algorithm to localize robot and detect room boundaries from 3D point-cloud data
– Developed "scavenger hunt" policy to optimally manage and execute tasks or goals given in real time

Pierce-Shimomura Lab   June 2012 – August 2013
Research Assistant, Austin, TX

– Propagated *C. Elegans* test subjects daily, ensuring health of the subjects and removing contaminants
– Discovered the neurological process responsible for geomagnetic sensation in animals
– Published "Magnetosensitive neurons mediate geomagnetic orientation in *Caenorhabditis Elegans*" to eLife journal

PROJECTS

Support Vector Machines for HFT   December 2018 - February 2019
Personal project, Austin, TX

– Developed a modified pairs trading algorithm for GOOG/GOOGL
– Incorporated support vector machines to identify trading opportunities from minutely price data
– Achieved testing accuracy of 0.71 over a 100 minute period after training over 2000 minutes

Poker AI   June 2017 – August 2017
Personal project, Austin, TX

– Developed AI to competitively play Heads-Up No-Limit Texas Hold'em Poker
– Incorporated LSTM and standard feedforward neural networks to adapt playstyle based on game history
– Strategically discovered and exploited mannerisms in opponent playstyle in real time

LEADERSHIP EXPERIENCE AND ACTIVITIES

Undergraduate Computational Finance   August 2016 – Present
President, Austin, TX

– Led multiple teams through ideation and execution to construct and pitch strategies for consideration in the team portfolio
– Created a model to predict VXX/VXXB price movements from VVIX and the implied convexity of VIX futures
– Formulated an algorithm to optimize investment allocation in a portfolio of other trading algorithms
– Analyzed, consolidated, and published current events and market conditions biweekly to the organization

HONORS

– The University of Texas at Austin, University Honors   Fall 2016 – Fall 2018
– The University of North Texas, President's List   Fall 2014 – Spring 2016
– American Invitational Mathematics Examination, Certificate of Distinction   Fall 2012 – Spring 2015

ADDITIONAL INFORMATION

Skills: C, C++, Java, LaTeX, Python, R, Scala, Vim Script, exposure to Bash, Haskell, Javascript, Swift
Interests: Powerlifting (190/120/190kg), Sushi, Classical Piano, Heavy Metal, Modal Text Editors, Mechanical Keyboards
Work Eligibility: Eligible to work in the U.S. with no restrictions