

# NICHOLAS TRUONG

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## EDUCATION

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### The University of Texas at Austin

May 2020

- Bachelor of Science, Computer Science Honors (Turing Scholars)
- Bachelor of Science, Mathematics
- Bachelor of Business Administration, Business Honors
- Overall GPA: 3.75

## RESEARCH EXPERIENCE

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### 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 given tasks

### Center for Space Research

June 2014 – August 2014

*Research Assistant*, Austin, TX

- Selected from 200 applicants as 1 of 11 students to join the summer program
- Analyzed sea level changes to identify discrepancies between satellite readings for further calibration
- Presented results to active researchers at the Center for Space Research

### Pierce-Shimomura Lab

June 2012 – August 2013

*Research Assistant*, Austin, TX

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

## PROJECTS

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### Doomsday

August 2017 – December 2017

*Personal project*, Austin, TX

- Created a reinforcement learning framework that simplifies training process
- Uses Q-approximation to identify optimal feature weights based on user-defined environments

### Pegasus

June 2017 – August 2017

*Personal project*, Austin, TX

- Developed AI to competitively play Heads-Up No-Limit Texas Holdem Poker
- Incorporated LSTM and standard feedforward neural networks to develop strategy based on game state

## LEADERSHIP EXPERIENCE AND ACTIVITIES

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### Undergraduate Computational Finance

August 2016 – Present

*Director*, Austin, TX

- Lead members to present trading strategies and pitch ideas for consideration in team portfolio
- Formulated trading algorithms to optimize a multiple portfolio of other algorithms
- Created reinforcement learning trading agent to identify latent features in time series data
- Analyze current market conditions and correspond biweekly status reports to the whole team

## HONORS

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|---|-------------------------|
| – The University of Texas at Austin, University Honors                      | Fall 2016 – Spring 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

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**Computer Skills:** C, C++, Java, Python, R, exposure to Haskell, Scala, Javascript

**Interests:** Powerlifting (185/107.5/185kg), Piano, Philosophy

**Work Eligibility:** Eligible to work in the U.S. with no restrictions