YIMING SHI

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EDUCATION

University of Michigan, Ann Arbor, MI

Aug 2018 - Apr 2020(Expected)

Candidate for B.S. in Computer Science, Minor in Mathematics

Overall GPA: 3.89/4.00

Coursework: Intro to Operating Systems, Deep Learning, Database Management System, Intro to Computer Organization, etc. Awards: Dean's List (Fall 2018, Winter 2019), University Honors (Fall 2018, Winter 2019)

Shanghai Jiao Tong University, Shanghai, China

Sep 2016 - Aug 2020(Expected)

Candidate for B.S. in Electrical and Computer Engineering

Major GPA: 3.80/4.00

Coursework: Honors Mathematics, Discrete Mathematics, Probabilistic Methods in Engineering, Intro to Logic Design, etc.

Awards: Dean's List (Fall 2016, Summer 2017, Fall 2017, Summer 2018), Merit Undergraduate Scholarship

PROJECT EXPERIENCE

Disentangle Multi-Domain, CROMA Lab, University of Michigan, Ann Arbor, MI

 $Sep\ 2019-present$

• Build disentanglement system for conversation channels without labeling abundant training data in their domain based on current well-performed disentanglement system using transfer learning.

Software Debugging System – HASE, EFES Lab, University of Michigan, Ann Arbor, MI

May 2019 - present

- Build a better debugging system based on KLEE symbolic execution engine.
- Gather, verify and analyze execution constraints statistics over GNU Coreutils and SQLite using KLEE symbolic system. Verify KLEE correctness of constraint generation. Fix the incorrect constraints generation scheme.
- Exploit better constraints generation scheme to improve performance of constraint solver and extend the ability of KLEE.

Deep Neural Network for Yelp Recommendations, University of Michigan, Ann Arbor, MI Jun 2019 – Jul 2019

- \bullet Built a recommendation system predicting top N favorite business of Yelp users using deep neural network and k-nearest neighbors method based on Yelp dataset using TensorFlow.
- Visualized results in 2D dimension. Wrote a report paper showing works and results. Proposed possible future works.

Pager – Memory Manager, University of Michigan, Ann Arbor, MI

Feb 2019 - Mar 2019

- Designed and implemented a pager managing application processes' virtual address spaces.
- Implemented system calls to create, copy, and destroy address spaces, allocate space in an existing address space, and switch between address spaces. Implemented the interrupt handler for memory faults.

Tweet Sentiment Analysis, University of Michigan, Ann Arbor, MI

Feb 2019 - Feb 2019

• Used multi-class support vector machine to predict sentiment of given tweets using scikit-learn. Analysed and reasoned performance for different regularization methods, weights, and kernels using different metric.

Bitcoin Arbitraging, Strategic Reasoning Group, University of Michigan, Ann Arbor, MI

Nov 2018 - Mar 2019

 $\bullet \quad \text{Used machine learning methods to predict future arbitraging opportunities in bitcoin market}.$

OTHER EXPERIENCE

Instructional Aide for EECS 445 Intro to Machine Learning, University of Michigan, Ann Arbor, MI Fall 2019

- Teach weekly discussions, hold office hours and project tutorials to aid students with course material. Design exam questions.
- Assist the professor with administration, grading, writing, and proctoring exams.

Deputy Director of iCareer Department, Shanghai Jiao Tong University, Shanghai, China Fall 2017 – Summer 2018

- Organized career development events, including Internship Campus Talk, Business Elite Competition, company visiting.
- Provided and managed one-to-one communication platform between tutors (alumni, faculties, senior students) and students.
- \bullet $\,$ Major writer and editor of Joint Institute Career Manual.

Winter Intern, Maver Medical, Shanghai, China

Dec 2017 - Jan 2018

- Learned to build a 3D model based on video and depth information using deep learning for clinical gait analysis.
- Read related paper and conducted presentation showing strengths of our product.

Honor Council Investigator, Shanghai Jiao Tong University, Shanghai, China

Sep 2017 - Aug 2018

• Investigated Honor Code violation cases with Faculty Committee on Discipline to ensure academic integrity.

SKILLS

Computer: C, C++, Python, SQL, Java, Matlab, Mathematica, Arduino, Multisim, Pspice, Xilinx Vivado, LATEX