

YIMING SHI

1929 Plymouth Rd., Ann Arbor, MI 48105
syiming@umich.edu ♦ +1 (734)545-9508

EDUCATION

University of Michigan, Ann Arbor, MI *Aug 2018 – April 2020(Expected)*
Candidate for B.S. in Computer Science, Minor in Mathematics
Coursework: Introduction to Machine Learning, Database Management System, Introduction to Operating Systems, Introduction to Computer Organization, Data Structures and Algorithms, Numerical Methods for Engineers and Scientists, etc.
Overall GPA: 3.96/4.00

Shanghai Jiao Tong University, UM-SJTU Joint Institute, Shanghai, China *Sept 2016 – Aug 2020(Expected)*
Candidate for B.S. in Electrical and Computer Engineering
Coursework: Introduction to Computer Programming, Programming and Elementary Data Structures, etc.

PROJECT EXPERIENCE

University of Michigan, Ann Arbor, MI *Feb 2019 – Feb 2019*
Tweet Sentiment Analyzing Using Support Vector Machine

- Extract unique words from dataset. Convert tweet into feature vectors. Feature engineering using filter approach.
- Train our models using Python. Use stratified 5-fold cross validation method to measure performance of our model and calculate performance matrices – Accuracy, F1-Score, AUROC, Precision, Sensitivity, Specificity.
- Measure our performance on different models – linear and quadratic kernel, L1 and L2 penalty, one-vs-one and one-vs-all method, etc. Perform grid search and random search to select the best hyperparameter based on validation error.
- Test our ultimate classifier on a separate set of testing data to measure final performance.

University of Michigan, Ann Arbor, MI *Nov 2018 – Present*
Strategic Reasoning Group - Bitcoin Arbitraging Project

- Gather Bitcoin trading data. Reconstruct the order book using Python and identify potential points for triangular arbitraging.
- Extract interesting features and form thesis for triangular arbitrage in Bitcoin market.

University of Michigan, Ann Arbor, MI *Nov 2018 – Dec 2018*
MST, TSP Project

- Implement MST and a Branch and Bound algorithm using C++. Choose an efficient MST algorithm. Develop a fast and effective bounding algorithm.
- Explore various heuristic approaches to achieving a nearly-optimal solution as fast as possible.

University of Michigan, Ann Arbor, MI *Nov 2018 – Dec 2018*
GUI Project

- Design and implement a Wheel of Fortune game using Java.
- Design and implement the user interface for the game using Swings.

University of Michigan, Ann Arbor, MI *Nov 2018 – Nov 2018*
Database Project

- Emulate a basic relational database using C++ with an interface based on a subset of a standard query language.
- Evaluating the runtime and storage trade-offs for storing an accessing data contained in multiple data structures.

Shanghai Jiao Tong University, UM-SJTU Joint Institute, Shanghai, China *June 2017 – Aug 2017*
Temperature Controlled Water Bottle Team - Team Leader

- Design and implement the control system using Arduino for controlling the temperature of water in the bottle.
- Present the design process, principle and final product to our professors and fellow students.

Shanghai Jiao Tong University, UM-SJTU Joint Institute, Shanghai, China *Nov 2016 – Dec 2016*
OpenGL Project

- Learn and apply singleton design pattern.
- Design a program to manage a car park and write a simulation using C++ where random vehicles enter and exit the parking lot over a given period of time.
- Use OpenGL to design a parking lot with different kinds of vehicles and drive vehicles into free slots.

LEADERSHIP

Shanghai Jiao Tong University, UM-SJTU Joint Institute, Shanghai, China

Sept 2017 – Aug 2018

Deputy Director of iCareer Department

- Organized personal development events, including 2018 Winter Internship Campus Talk, 2018 Huawei Business Elite Competition, Coca-cola Inc. Visiting to help participants on career development.
- Invite our alumni, faculty, senior students to be tutors of our students and offer a platform for them to have one-to-one communication
- Designed the cover, collect and organize the materials for Joint Institute Career Manual.

INTERN EXPERIENCE

Maver Medical, Shanghai, China

Dec 2017 – Jan 2018

Winter Intern

- Learn technical characteristics and implement details useful for business promotion.
- Collect and analyze the advantages and disadvantages of our product with other similar products on the market.
- Make PowerPoint illustrate the working principle and advantages of our product.

OTHER EXPERIENCE

Shanghai Jiao Tong University, UM-SJTU Joint Institute, Shanghai, China

Sept 2017 – Aug 2018

Class Assistant

- Help freshmen get familiar with the study and life in Joint Institute.

Thinktown Education Inc., Hangzhou, China

Jul 2016 – Aug 2016

Teaching Assistant

- Assisting English teaching process and help to set up examinations.

SKILLS

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

Language: Fluent in English and Mandarin.

ACTIVITIES

UM-SJTU Joint Institute Honor Council – *Investigator for Academic Integrity*

Sept 2017 – Aug 2018

iCareer Department in Joint Institute Student Union

Aug 2017 – Aug 2018

Volunteer for National High School Debate of China

May 2017 – May 2017

"Dawn Cup" Mechanical Competition

Mar 2017 – Apr 2017

Badminton Club – *Second Price for Double*

Sept 2016 – Aug 2018

Liaison Department in Joint Institute Student Union

Sept 2016 – Aug 2017