Tianyuan Wu

1311 Wilmot ST, MI, 48104
wutian@umich.edu | (734)-223-1102
LinkedIn: https://www.linkedin.com/in/tianyuan-wu-9b1461b1
GitHub: https://github.com/ty-wu

Education

University of Michigan, Ann Arbor, MI — Expect Dec 2018
Transfer Student, Bachelor of Science in Dual Major of Computer Science and Mathematical Science

- **Current GPA: 3.45/4.0**
- **Core CS Courses:** **EECS281 Data Structures & Algorithm (C++), EECS370 Introduction to Computer Organization, EECS442 Computer Vision, EECS442 Introduction of Machine Learning, EECS 477 Algorithm, EECS492 Introduction of Artificial Intelligence**
- **Core Math Courses:** **Math420: Advanced Linear Algebra, Math425: Introduction of Probability, Math475: Number Theory**

Northeastern University, Boston, MA — Sep 2014 - May 2016
Bachelor of Science in Combined Major of Computer Science and Mathematics

- **GPA: 3.85/4.0, Dean's List**
- **Voluntary Math and Science Tutor at Hyde Square Task Force**

Skills

- **Programming**: C++/C, Python, HTML/CSS, Swift, JavaScript.
- **Operating Systems**: Mac OS, Linux.
- **IDE and Other Skills**: XCode, Sublime, Git, LaTex , MATLAB, SQL, R for Stats.

Experience

Triple E Framework, Ann Arbor, MI http://tripleepln.org/#!/ — Sep 2018-Present
Web Developer

- Independent study program. Full stack web development.
- Built up a website for an educational project leading by Prof. Liz Kolb for University of Michigan College of Education.
- Designed the web interface with HTML and CSS. Used AngularJS to create page controllers and implement functionalities.
- Managed user's information using Parse at the back-end.

Newnan Academic Advising Center, Ann Arbor, MI — Apr 2018 – Sep 2018
International Academic Peer Advisor

- Helped Newnan Advising center organize the orientation.
- Helped new international students to do registration, gave them advise about courses, and inspired them to come up with long-term academic plans.
- Gave presentations about course system and registration process to students and parents groups of size around 50.

Projects

Sleep A+ **https://github.com/ty-wu/SleepAP**
IOS App — May 2018 – Present

- Supported a self-awareness research led by Dr. Robert Pasick with implementing his theory into a mobile application.
- Took advantage of Swift Frameworks tools such as Pod and Charts.
- Designed the User Interface with both Storyboard and hand-written code.
- Will record the running logs of the program, and create a Machine Learning module using supervised learning to improve the performance of the robot player.

House Numbers Classification **https://github.com/ty-wu/Number_Classifier**
Computer Vision Project — Sep 2018

- Employed the MINST data set as the training set, and SVHN data set as the testing set.
- Extracted features of numbers from the training set with the method of Principal Component Analysis.
- Created a supervised-learning model by implementing the k-nearest-neighbors algorithm and classified the test set.
- Took advantage of ETA modulus and OpenCV Library.

Feeding Routine Optimization for Zookeepers https://github.com/ty-wu/Path-Finding
Data Structures & Algorithm Final Project — Jun 2017

- Implemented Greedy Algorithms, such as Prim's and Kruskal's Algorithm, to optimize the Minimum Spinning Tree.
- Approximated the shortest path passing every feeding spot only once (TSP) by implementing closest neighbor algorithm.
- Implemented Brute-Force algorithm to find the exact shortest path for TSP, and accelerated the process by applying Branch-and-Bound algorithm with MST as the constraining upper bound.
- Provided 8 unit tests for the project.