1056 Main Street
Lynnfield, MA 01940

Mickey J Chao

mjchao@umich.edu
978-595-6258

Projects

Strongest Languages: Java, C++, Python (NumPy, Tensorflow, Scikit-Learn, Matplotlib, Pandas)
Familiar Languages: Javascript, Visual Basic and VBA, MATLAB
Github: https://github.com/mjchao (additional projects here)

Google **Word Vectors for Visual Shopping** **Summer 2016**

- Represented words in Google's merchant data with vectors to improve visual shopping advertising algorithms.
- Created pipeline that processes training data, learns word vectors, and evaluates them.

Personal Project **Photo OCR of Sudoku Puzzles** **Winter 2016**

- Implemented algorithms for segmenting and extracting digits from pictures of Sudoku puzzles.
- Applied OpenCV library for machine learning and image processing.
- Project URL: https://github.com/mjchao/Sudoku-Solver.

Jump Trading **Test Framework for Trading System** **Summer 2015**

- Created framework to automate testing of a gateway that connects trading programs with an exchange. An interpreter parses high-level commands to submit trading messages and perform verifications.
- Integrated gateway test framework with another intern's market data test framework to assess correctness of a PnL (Profit & Loss) server that manages risk.

University of Michigan UROP **Data Integration in Real Time (Diirt)** **Fall 2014 – Winter 2015**

- Collaborated with peers and mentor to maintain and improve the open source Diirt library.
- Unit-tested existing code with JUnit and exposed undetected bugs. Developed algorithms to remove redundant information from time axis labels. Abstracted out graphing system with Java 8 for third-party use.
- Project URL: https://github.com/diirt/diirt.

Work Experience

Software Engineering Intern **Google** **Summer 2016**

- Contributed to visual shopping team's machine learning pipeline that learns visual aspects of products.
- Applied internal tools and open-source Tensorflow library for computing at a large scale.

Quality Assurance Engineer Intern **Jump Trading** **Summer 2015**

- Developed frameworks to automate testing of website UIs, a gateway application, and a PnL server.
- Delivered formal requirements and test plan documents for systems to be tested.

Education

B.S.E. Computer Science **University of Michigan, Ann Arbor** **2014 – 2017 (expected)**

- 3.96 GPA. Recipient of the William J. Branstrom Freshman Prize for GPA in top 5% of class after 1 semester.
- Competed in International Collegiate Programming Competition. 1st place team Michigan site, 12th place team East-Central North America region.
- Sample coursework: Intro Artificial Intelligence, Intro Machine Learning, Intro Probability, Linear Algebra.
- Anticipated minor in mathematics.

High School **Phillips Exeter Academy** **2010 – 2014**

- 3.58 GPA. Received computer science and mathematics department awards for outstanding work.
- Promoted to gold division of USA Computing Olympiad, a national, high school programming contest.
- Sample coursework: Software Engineering, Digital Electronics and Physical Computing, Computer Algebra.