

Yuan-Ting Hsieh

☎ (702) 235-3426 | ✉ yhsieh28@wisc.edu | 🌐 [Yuan-Ting-Hsieh](#) | 📷 [YuanTingHsieh](#)

Education

University of Wisconsin-Madison

Expected June 2019

Master of Science in Computer Sciences GPA: 4.0/4.0

Madison, WI

Coursework Database Management Systems, Theory and Applications of Pattern Recognition, Computer Vision, Large-scale Machine Learning and Optimization, Data Science

National Taiwan University

Jan. 2017

Bachelor of Science in Electrical Engineering GPA: 3.83/4.0

Taipei, TW

Honors College Student Research Scholarship, Dean's List (top 5%; 3 semesters)

Coursework Machine Learning, Artificial Intelligence, Linear Algebra, Probability and Statistics
Data Structures and Programming, Algorithms, Operating Systems, Computer Architecture

Skills

Programming Languages Python, C/C++, MATLAB, Java, Javascript, Qt, Bash, SQL

Toolkit/Frameworks TensorFlow, Linux, Git, LIBSVM, Scikit-Learn, OpenCV, XGBoost

Work Experience

JD.com

May 2018 - Present

Natural Language Processing Research Intern

Mountain View, CA

- Performed research on the intent classification module of JIMI, JD's chatbot, using deep learning methods
- Implemented and experimented with several latest NLP papers including Temporal Convolutional Network, Simple Word-Embedding based models, and Hierarchical Attention Network in TensorFlow to verify their effectiveness
- Proposed a hierarchical attention dilated convolutional neural network model and fine tune the hyper-parameters on 350,000 training data to achieve 88.9% accuracy with 287 class on 40,000 testing data

University of Wisconsin-Madison

Sept. 2017 - Present

Teaching Assistant of CS 200: Programming I (Java)

Madison, WI

- Collaborate with fellow TAs and instructors on a weekly basis to discuss course content and assignments
- Lead discussions and work with students in lab sessions to promote their learning and development

AMAZE

June 2017 - Aug. 2017

Data Scientist Intern

Taipei, TW

- Scrutinized user's online clothing rental behavior to better promote the product
- Built a product recommender with Factorization Machines based on users' click behavior
- Analyzed and synthesized data to incorporate and modify open-source machine learning software library

Research and Selected Projects

Interactive Image Completion [C++, MATLAB, OpenCV] [\[Website\]](#) [\[Video\]](#)

- Built an image completion software which uses the same algorithm of Adobe's Content-Aware Fill in Photoshop
- Performed PatchMatch algorithm in multiple scales to achieve smoother images
- Developed a MATLAB user interface which enables users' interactive feedback to improve the final result

Domain Adaptation for Object Recognition and Cross-Lingual Text Categorization [MATLAB]

- Proposed an approach to solve heterogeneous domain adaptation by matching cross-domain data distributions
- Outperformed other state-of-the-art methods on object recognition by average 5% performance improvement
- Co-authored a 6-page full paper and illustrated findings in International Conference on Multimedia and Expo. [1]

MOOC Dropout Prediction (KDD Cup 2015) [Python, XGBoost]

- Extracted and aggregated 482 features from 8 million users' behavior data by exhaustively feature engineering
- Analyzed with Gradient Boosting Decision Trees to achieve a Mean Average Precision of 0.968 of top 9,000 predictions

Real Steel [C/C++, Qt, QML] [\[Video\]](#) [\[Code\]](#)

- Built a motion-sensing boxing game with graphic user interface without prior knowledge in Qt in a month
- Integrated 6-DOF motion sensors and Raspberry Pi with Bluetooth and Wi-Fi to detect movements in real time

Publications

- [1] **Yuan-Ting Hsieh***, Shih-Yen Tao*, Yao-Hung Hubert Tsai, Yi-Ren Yeh and Yu-Chiang Frank Wang, "Recognizing Heterogeneous Cross-Domain Data via Generalized Joint Distribution Adaptation", in *IEEE ICME 2016*

(**Oral: top 15%**; *equal contributions) [\[PDF\]](#) [\[Code\]](#) [\[Data\]](#) [\[Talk\]](#) [\[Slides\]](#)