MENGYING **LI**

San Diego, CA | C: 858-699-3197 | mel116@ucsd.edu | https://mengying-li.github.io

Education

Bachelor of Science: **Mathematics and Computer Science joint major** **Dec 2019**
University of California San Diego GPA 3.65
Relevant Coursework: Objective Oriented Design, Advanced Data Structures, Software Engineering, Design and Analysis of the Algorithms, Machine Learning, Operating System, Recommendation System

Experiences

Software Engineer Intern **06/2019 to now**
Teradata **San Diego, CA**
Designed and implemented generic incident model architecture in **python** and improved SAM (AI-powered automation service recommending solution to known software crash)
Handled more generalized crashes and increased crashes processed by SAM by 20% in Q3 and 130% in Q4
Refactored code from inheritance to composition making it more maintainable, robust, flexible and scalable

Software Engineer Intern **03/2019 to 06/2019**
American Specialty Health **San Diego, CA**
Prototyped multiple proof of concept **Android app** for people having trouble sleeping in **Java**
Built advertising websites for front door experiment utilizing Google Ads to find target group of customer

Software Engineer Intern **07/2018 to 09/2018**
Nanome Inc **San Diego, CA**
Designed, implemented and tested **DSSP algorithm** (hydrogen bond estimation) described in paper in **C#**
Optimized runtime of DSSP algorithm, improved the speed by 80% and achieved accuracy over 97%
Developed keyword search function inside the application by making API requests and writing web crawler
Troubleshot and resolved race condition and networking issues spotted in the front end of keyword search

Software Developer Intern **06/2017 to 09/2017**
Nanome Inc **San Diego, CA**
Parsed MMCIF format file from the World Protein Bank to the application and optimized algorithm 50% faster
Developed a notification board feature after a series of design experiments in VR application in unity in **C#**

Full Stack Developer **02/2017 to 07/2017**
Comparative Cognition Lab (UCSD) **San Diego, CA**
Designed and implemented a website using **NodeJS**, **MySQL**, **JS** to store and visualize primates data
Coded features such as authentication, data administration, search, play local video in web page
Communicated back and forth with professor when designing functionalities and troubleshot for end users

Projects

Music Genre Predication Based on Lyrics, Machine Learning project **10/2018 to 12/2018**
Program using SVM, random forest, LSTM, RNN and CNN to classify songs' genres based on their lyrics

- Trained NLP model of convolution neural network using python with tensor flow in **Jupyter Notebook**
- Reached 87% of the original paper performance for prediction across 10 music genres
- Project Paper Link: https://bit.ly/2DxLHxB

Skills

- **Web Development**: Intermediate NodeJS, ReactJS, JavaScript, HTML,CSS, jQuery skills
- **Databases**: MySQL, firebase, Teradata db
- **Programming**: Python, Java, C, C++, C#
- **Others:** Machine learning, Recommendation System, Algorithms, Jenkins, Git