Zhongming Mu

1915 Maple Ave, Evanston, IL 60201
(312) 722-1261 zhongmingmu2015@u.northwestern.edu

QUALIFICATION

Creative, self-driven, fast learning graduate student with 5 years programming experience, from Northwestern University major in Electrical Engineering, looking for a full time software engineer position.

EDUCATION

- **M.S. Electrical Engineering (GPA 3.8/4.0)** Sept 2015 - Dec 2016
  Northwestern University
- **B.E. Electrical Engineering and Automation (GPA 3.8/4.0)** Sept 2011 - June 2015
  Beijing Institute of Technology (China)
- **Summer school** July 2013 - Sept 2013
  University of California in Berkeley

WORK EXPERIENCE

- Chinese Academy of Sciences, Automation Branch July 2014 – Aug 2014
  Title: Software Engineer (Fulltime internship)
  - Developed and tested the User Interface to initialize, set parameter and control a 3D printer by C++. This 3D printer is used for medical purpose, it aims to print human organs by human cells solution to solve the rareness of human organs
  - Together with a group to developed the motor control algorithm, this 3D printer uses 3 motors to control the output direction and quantity of human.

PROJECTS

- Personalized Restaurant Search and Recommendation Web Service & App June 2016 - Aug 2016
  - Developed an interactive web page(HTML/Javascript) for users to search restaurant, update preference and view recommended restaurants.
  - Developed a web service using (Java servlet, REST API) to fetch restaurant data from Yelp API.
  - Utilized MySQL/MongoDB to store user preference and restaurant information.
  - Designed and developed a filter and sorting algorithm and matched similar restaurants.
  - Tested the web service with unit tests(JUnit).
  - Github: https://github.com/ZhongmingMu/Dashi.git
- Restaurant Recommendation App on Android Aug 2016 – Sept 2016
  - Integrated Google Map API into the app.
  - Implemented a logic layer to communicates with data backend (Yelp API).
  - Optimized backend call latency by using client side caching.
  - Implemented a fragment based dynamic UI based on screen size.
  - Github: https://github.com/ZhongmingMu/RestaurantApp.git
- Data Science: User Churn Prediction Aug 2016 - Sept 2016
  - Applied supervised learning models (logistic regression, random forest, etc.) to identify customers who are likely to stop using service in the future.

- Used different feature selection methods to analyze top factors that influence user intention in telecommunication companies.
- Implemented this machine learning pipeline using Apache Spark ML-lib and test it on Hadoop ecosystem.
- Github: https://github.com/ZhongmingMu/DataSience.git

- Data Science: Document Clustering and Topic Modeling Aug 2016 - Sept 2016
  - Applied Natural Language Processing methods (TF-IDF, N-grams, etc.) to cluster unlabeled documents into different groups and visualize results.
  - Identified latent structures from documents using different clustering models (K-means, Latent Dirichlet Allocation).
  - Github: https://github.com/ZhongmingMu/DataSience.git
- Distributed System: Kademlia Distributed Hash Table March 2015 - June 2016
  - Developed a Kademlia DHT by GO, in which each node can contact to each other.
  - Developed a Distributed File System based on the DHT, in which we can store and search files
  - Developed a vanish function to the DFS to set authority to specific files.
  - Github: https://github.com/ZhongmingMu/EECS-345.git

PROGRAMMING SKILLS/TOOLS

- Java, Python, C/C++, SQL, Pthreads, HTML5, CSS, JavaScript, Go.
- Eclipse, Android Studio, Xcode, Microsoft Visual Studio 2010, Matlab, LabView

CORE COURSES

Design and Analysis of Algorithms, Human Computer Interaction, Distributed System, Parallel Computing, Data Structure, Computer Network, Computer System, Programming Language, Machine Learning, Programming Massively Parallel Processors with CUDA,