# Weiqi Weng

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#### **EDUCATION**

Northeastern University, Boston, MA

Sept 2015 - Present

Candidate for Master of Science in Computer Science GPA: 3.857/4.0 Expected graduation: Dec 2017

## East China Normal University, Shanghai, China

Bachelor's Degree in Mathematics and Applied Mathematics

Sept 2011 - July 2015

#### TECHNICAL KNOWLEDGE

**Language**: Python(TensorFlow, scikit-learn, numpy, pandas, scipy, matplotlib), C/C++, R, Java, JavaScript

**Database:** MySQL, MongoDB, Vertica

Web: Express, AngularJS, Node.js, HTML, CSS, jQuery, Bootstrap, PHP

**Software**: Visual Studio, PyCharm, RStudio, Eclipse, WebStorm, Matlab, SPSS, DBeaver

### WORK EXPERIENCE

Winner Information Technology, Shanghai, China

Business Intelligence Intern

June - Aug 2014

- Developed a module in MFC to auto-download CSV files from Winner's FTP server, merged the files upon keywords, uploaded the final file to database and composed configuration document for customer use
- Co-designed a testing software to gather video stream from webcams and created a base class of webcam to make the software an open-ended product
- Optimized Winner's server storage by saving 6% of the space and saved approximately 11% of time to do further data analysis

### Wayfair, LLC., Boston, MA

Data Scientist Coop Jan 2017 - Present

- Developed a python MVC Desktop App, set up a Jenkins pipeline and automated the bidding process for retargeting team based on data queried from Vertica node and Facebook Marketing API
- Building an Elasticity Model to analyze the relation between bids on Facebook online ads inventory and corresponding multi-click revenue, inserting the model into the bidding App

### ACADEMIC PROJECTS

## Northeastern University Course Project, Boston, MA

Prediction on Diabetes Mellitus Onset and Patient Readmission

Sept - Dec 2016

- Fixed imbalance with SMOTE plus Tomek Link and preprocessed via normalization and missing data imputation
- Ran Grid Search Cross Validation to optimize reduced dimension of PCA, encoding layer size of Auto-encoder and weight decay, Xavier-initialized and trained a Back Propagation Neural Network model with 79.81% testing accuracy to predict Diabetes Mellitus Onset
- Established four different tree-based models, optimized hyper-parameters by Grid Search Cross Validation and selected Feature-selected Random Forest with 94.14% testing accuracy to predict diabetes patient readmission
- Analyzed model performance with confusion matrix, error bar plot, mean accuracy scatter plot and statistics including sensitivity, specificity, F1 score and precision

## Everbridge Co-op Project, Boston, MA

A Regression View of Everbridge Mass Notification Service

Sept - Dec 2016

- Cleaned and extracted data of notification configuration, contacts' system setting and their background followed by Exploratory Data Analysis
- Trained a Softmax Regression model to predict whether a notification will be confirmed, confirmed late or not confirmed and then tuned a Multiple Regression model to predict the time for a notification to be confirmed
- Quantified the effect of path type, number of registered contact paths, batch size, contacts' region and notification configuration in terms of final confirmation status and confirmation time to better support notification configuration decision making