Weiqi Weng

28 Westland Ave, Apt. 27, Boston, MA 02115
(857) 284-9548 | weng.wei@husky.neu.edu | weiqiweng.github.io

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
Teaching Assistant of Data Mining Techniques/Unsupervised Learning Sept 2017 – Present

East China Normal University, Shanghai, China
Bachelor's Degree in Mathematics and Applied Mathematics Sept 2011 - July 2015

TECHNICAL KNOWLEDGE

Language: Python, C/C++, R, Java, JavaScript, Scala
Database: MySQL, MongoDB, PostgreSQL, Vertica
Web: AngularJS, React, Node.js, Express, HTML, CSS, jQuery, Bootstrap, PHP
Software: PyCharm, RStudio, Visual Studio, Eclipse, WebStorm, Matlab, SPSS, DBeaver

WORK EXPERIENCE

Winner Information Technology, Shanghai, China Software Engineer Intern June - Aug 2014

- Developed a software in MFC to auto-download and pre-process shopping mall visitor records and saved 6% database storage of shopping mall visitor records business
- Co-designed a testing software to gather video stream from webcams and render pictures locally

Wayfair, LLC., Boston, MA Data Scientist Co-op Jan – July 2017

- Established an Airflow dag to fetch Wayfair Display Retargeting daily cost and bid on Facebook through Facebook Marketing API
- Independently developed a decision-making support software in Python MVC with an Elasticity-based Optimization Model integrated to recommend new bid based on customer segments and DPA tag configuration, and freed the whole display retargeting team from extremely manual operations
- Automated the bidding process for display retargeting team through Jenkins pipeline according to decision-making support software return, ran online tests on 12 DPA tags and lowered ACNR to 17% on average

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 picked up 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