

Aaron (Shixiang) Zhou

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EDUCATION

Columbia University (CU) , New York, NY	Sept. 2016 – Feb. 2018
Master of Science, Industrial Engineering	GPA: 3.87
University of Michigan (UM) , Ann Arbor, MI	Sept. 2014 – Apr. 2016
Bachelor of Science, Industrial and Operations Engineering	GPA: 3.86
Courses: Machine Learning, Personalization, Cloud Computing, Dynamic Pricing, Data Structure & Algorithm	

EXPERIENCE

International Business Machines Corporation (IBM) , Shanghai, China	Jun. 2017 – Aug. 2017
<i>Business Analyst Intern. B2B2C E-commerce Development (Client: SAIC Volkswagen)</i>	
<ul style="list-style-type: none">Helped design relational database schema based on client's business requirementsDrafted and maintained product requirement documents (PRD), Axure prototype and JIRA boards in an Agile Software Development environment, suggested features based on data driven researchesLaunched SVW E-commerce website (alpha version) in two months	
Jennison Associates LLC , New York, NY	Oct. 2016 – Feb. 2017
<i>Applications Intern</i>	
<ul style="list-style-type: none">Responsible for maintaining data in Oracle database by performing data cleaning, transformation and ensuring integrity in a relational environment, conducted unit and functional testingDesigned and created system status dashboards showing buggy services	
University of Michigan Transportation Research Institute , Ann Arbor, MI	May 2015 – Aug. 2015
<i>Research Assistant. Research in Consistency of Readability Equations</i>	
<ul style="list-style-type: none">Programmed Python web scraper automating readability data collection for technical documentsAnalyzed score inconsistency among different tools by using ANOVA and bootstrap aggregating, investigated in detailed implementation difference and gave suggestions on sample lengthPublished a quantitative research paper as first author in <i>IEEE Transactions on Professional Communication</i>	

PROJECT

Sentimental BGM Chrome Extension: Live in Drama	Oct. 2017 – Dec. 2017
<ul style="list-style-type: none">Created a chrome extension enhancing web surfing experience with NLP and music recommender systemDesigned a hybrid recommender system that combined user collaborative filtering and sentiment analysisDecreased MSE of user hit rate from naive benchmark 0.18 to 0.13	
Text Normalization Challenge (Kaggle NLP competition)	Oct. 2017 – Nov. 2017
<ul style="list-style-type: none">Applied XGBoost with context to label test data by using 10 GB training text (digit/ordinal/...)Created label-wise regex functions to convert labeled text into normalized form (“\$2” to “two dollars”)Gained 99.03% accuracy compared to the 92.6% benchmark	
Twitter Sentiment Map in Node.js	Sept. 2017 – Oct. 2017
<ul style="list-style-type: none">Developed an AWS Elastic Beanstalk web application using Node.js in an auto-scaling environmentUsed Twitter Stream API, Google Map API and AWS Elasticsearch geospatial feature allowing users to search tweets with sentiment analysis in a web UI based on keywords or clicked location	
Lending Club Data Analysis	Nov. 2016 – Dec. 2016
<ul style="list-style-type: none">Predicted probability of default for one million personal loans using 5 different machine learning algorithmsAssessed and compared classifier performance with ROC curves and obtained optimal AUC score of 0.83Identified factors that have significant influence on loan default	

SKILL

Programming Language: Python, R, SQL, Shell, C/C++, C#, HTML/CSS, JavaScript

Web Technology: AWS, REST, Hadoop, Spark, Django, Nodejs, Git, Vim

GitHub: <https://github.com/TickTack-z>