BING XU

Greater New York City Area

EDUCATION

Columbia University | Certification, *Data Sciences* New York, NY August 2015 –Present
Course(s): Algorithms for Data Science, Machine Learning
Cornell University | Master of Engineering, *Biomedical Engineering* Ithaca, NY May 2014
Syracuse University | Bachelor of Science Syracuse, NY May 2013
Dual Majors in *Bioengineering* and *Television-Radio-Film (Newhouse School)*
Minor in *Mathematics (Statistics and Probability)*

SKILLS

Analytics: Stochastic Analysis, Bayesian Modeling, Statistics and Probability, ANOVA, Multivariate Regression, k-means clustering, hierarchical clustering
Big data: Hadoop, HDFS, Spark, Hive, Pig, MapReduce
Programming: MATLAB, Igor Pro, R, Python, SQL, HTML
Software: AutoCAD, LabVIEW, ImageJ, COMSOL, Microsoft Office (Word, Excel, PowerPoint), Final Cut Pro, Photoshop, InDesign, Dreamweaver, Flash, After Effects
Laboratory: Recombinant DNA Technology, Microscopy, Neurophysiology lab, Motion Capture System
Language: Chinese, Basic Japanese

PROJECTS

Data Science Hackathon by Columbia University and Microsoft Azure Machine Learning
• Implemented machine learning algorithms and data visualization to investigate the partitions of housing value based on various sectors of geographical data using Microsoft Azure ML, Python, and web scraping techniques, and visualizing in Tableau. Data scrubbing/cleaning is also implemented.
Entrepreneurship for Engineers and Scientists
• Built a business model for innovative drug solution for Osteoarthritis (OA)
• Analyzed Market Opportunity and created Budgeting as well as Growth and Operating Strategy
Machine Learning and Algorithm Applications
• Optimization of text segmentation, shortest path and connected components for Network problems
• Classification for OCR images, newspaper brands, spam, and Recommender System using machine learning algorithms including Decision Tree, Random Forest, Logistic Regression, Neural Networks, Support Vector Machine (SVM), and Collaborative Filtering

EXPERIENCE

Research Assistant
Columbia University Medical Center, New York, NY May 2015 – Present
• Process and analyze experimental data gathered from medical devices, and write code for computer programs, primarily in Igor Pro and MATLAB, to further assist scalable data analysis including data converting, cleaning, scripts writing
• Assist with multiple projects and experiments in human motor control research for neurological disorders, such as Pakinson's disease,using high-end technology, such as PhaseSpace Motion Capture System
Research Assistant - Health Analytics
R&D, AIG Science, New York, NY January 2016 – May 2016
• Develop ETL and build complex models and solutions to support underwriting and segmenting risk profiles
• Use machine learning techniques analyzing big data related to healthcare product
Thermometer Engineer August 2013 - May 2014
Department of Biomedical Engineering, Ithaca NY
• Collaborated with WelchAllyn to design an innovative clinically used thermometer for human core temperature measurement including applications of heat transfer, signal acquisition, and data processing.
• Compiled documentation for IRB application, and acquired and analyzed time series of temperature data.