Eric (Kehan) Pan

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EDUCATION

Northwestern University, Evanston, IL | Expected Dec 2018
Master of Science in Analytics | GPA: 4.0 /4.0

Coursework: Predictive Analytics, Data Mining, Analytics Consulting, Machine Learning, MapReduce & Hadoop (expected)

Tsinghua University, Beijing, China | Sep 2013 - July 2017
Bachelor of Engineering in Industrial Engineering | GPA: 3.9 /4.0

Award: National Scholarship (top 0.2% in China), China Merited Undergraduate Student

Coursework: Data Structure & Algorithm, Operations Research, Deterministic Models, Decision Making, Stochastic Processes, Management of Information System, Modelling and Simulation, Transportation Systems Analysis

Georgia Institute of Technology, School of Industrial & Systems Engineering, Atlanta, GA | Aug 2015 - Dec 2015

SKILLS

- Programming: Python, R, Java, C, HTML, JavaScript, SQL
- Software: Tableau, Microsoft Office, Linux Environment, Web Server (AWS), LATEX

PROJECTS

Movie Recommendation System Based on Natural Language Processing, Chicago, IL | Dec 2017 - Present

http://movienet.us-west-2.elasticbeanstalk.com/

- Scraped 8 million movie ratings, reviews and posters from Amazon and stored in PostgreSQL database
- Trained semantic correlation model with Python; predicted movie genres and similar movies (70% consistent with IMDB)
- Built a website with Flask, HTML, JS(AJAX), Bootstrap and AWS; interacted with visitors and visualized results

Bitcoin Blockchain & Miner Data Analysis, Chicago, IL | Oct 2017 - Dec 2017

- Collected 490k rows of data on bitcoin blockchain and crawled data for related miners; stored in MySQL database
- Extracted behavior features, ran hierarchical clustering and analyzed behavior patterns of the miners

Office Automated Guided Vehicle (AGV) Delivery System, Beijing, China | Sep 2016 - Dec 2017

- Collected geospatial data of the office building and designed the navigation system for the vehicle accordingly
- Designed route planning algorithms with OR approach and experiments, allowing several deliveries simultaneously

Traffic Simulation and Optimization Analysis, Beijing, China | Mar 2016 - Apr 2016

- Simulated traffic, optimized for of traffic flow efficiency with CPLEX; proposed a plan promoting efficiency by 47%

EXPERIENCE

Data Science Consultant Part Time | Chicago Park District, Chicago, IL | Sep 2017 - Present
Analyzed customer segmentation with k-means clustering and built pricing model to improve access for low-income communities

Research Assistant | Tsinghua University & Lenovo, Beijing, China | July 2016 - July 2017
Designed text analytics algorithm for social media feedback analysis on mobile phones (adopted by Lenovo)

- Developed a model with Python and Java based on word embedding and Neural Network to analyze customer feedback sentiment; increased accuracy by 90% through optimization; used time-series analysis to model and monitor sentiment trend;
- Designed centroid-based clustering algorithm with Python to discover new customer pain points and their importance;

Data Analyst Intern, Customer Care & Experience | Lenovo, Beijing, China | June 2016 - Dec 2016
Proposed solutions to global customer feedback data

- Built a website for tagging call transcripts utilizing Django and Apache2, deployed on an Ubuntu server; enabled the dynamic updating of GBs of data each month, used by more than 100 employees
- Developed methodology for call center data process based on two-way ANOVA and outlier detection; increased efficiency by 5 times (now widely accepted and adopted by international branches)
- Analyzed call canter data and improved the product support website: benchmarked it, modified its structure and added into its knowledge base 25 frequently-occurring problems, reducing the number of related calls by 10%

Research Assistant | Georgia Institute of Technology, Atlanta, GA | Aug 2015 - Dec 2015
Researched statistical approach to calculating big data distance correlation with MATLAB and SAS

LEADERSHIP EXPERIENCE & INTERESTS

President, Love and Public Welfare Association | Tsinghua University, Beijing, China | July 2016 - June 2017
President, Students' Union | Tsinghua University, Beijing, China | June 2016 - May 2017

Interests: Swimming, Freediving, ballroom dance, Taekwondo (black belt)