Mingyuhui (Jane) Liu

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OBJECTIVE

As the top of class in Data Analytics with entrepreneurial experience, and the VP of Consulting Club, my goal is to become a **data analyst** in **Financial/Consulting Industry.**

EDUCATION

George Washington University, School of Engineering and Applied Sciences — **Washington, D.C.**
Master of Science in Data Analytics, GPA: 3.9/4.0 — **Expected 05/2019**

- Courses: **CFA I** Candidate, Programming for Analytics (**Python**), Database Systems (**SQL/NoSQL**), Applied Machine Learning

Duke University, Nicholas School of the Environment — **Durham, NC**
Master of Environmental Management, GPA: 3.65/4.0 — **05/2017**

- Courses: **Finance, Business Fundamentals,** Bayesian Inference in Environmental Models (**R**), Applied Data Analysis (**STATA**)

Xi'an Jiaotong University, School of Energy and Power Engineering — **Xi'an, Shaanxi, China**
Bachelor of Engineering, GPA: 3.56/4.0 — **06/2015**

- Courses: Automatic Control Systems, Electronical Engineering, Probability Theories

SKILLS

- **Tools: Python** (Pandas, SKLearn, NLTK, etc.), **MySQL**, **NoSQL** (MongoDB), **R** (Gjam, R2jags, MASS), **AWS, STATA,** HDFS **(Spark)**, Advanced Excel (VBA & Macros), Command Lines, HTML
- **Skills: Web Scraping** (API, BeautifulSoup), **Machine Learning** (SVM, KNN, K-Mean, NLP), **Data Cleaning** (OCSVR Outlier Detection, etc.), **Statistical Analysis** (PCA, Statistical Inferences, MCMC, Time Series, Cross Validation, etc.).

WORK & ENTREPRENEURIAL EXPERIENCE

United Nations Economic Commission for Europe (ECE) — **Geneva, Switzerland**
Consultant, Sustainable Energy Division — 05/2017 – 08/2017

- **Multitasked** several projects for Renewable Energy Team, and delivered results **in a fast-paced environment**:
  - Conducted in-depth data and policy research for 17 ECE regions, which published in the Energy Status Report 2017;
  - Collaborated with 5 sub-team leaders to prepare a 2-day match-making event for energy investment in Energy Expo 2017.

The Walla App, GenieUs, Inc. — **Durham, NC**
Management Team, Duke Start-up Challenge — 02/2016 – 05/2016

- **Incorporated GenieUs, Inc.**, and participated in the seed and development stage of the company:
  - Built the business model for GenieUs, Inc., and **campaigned for an alpha test** in March, and attracted 350 participants;
  - **Developed cash flow statement and revenue projections** with $5.7 million end cash of 5th year, based on estimated market size, technical & administration cost, and marketing & campaign cost, and **pitched the plan to angel investors**.

ANALYTICAL PROJECT (Detailed codes are available at: https://mingyuhuiliu.github.io/pages/Projects.html)

Pro-Bono Project: Smart Mobility Model for NGO's Ford Vehicle Utility Optimization — **Washington, D.C.**
Data Analyst; ***Client: The Ford Motor Company*** — 01/2018 – Present

- Reducing cost, generating revenue and expanding social impact for Ford's Project Better World:
  - **Collecting raw data** from NGOs in Project Better World on vehicles mobilities, such as mileage and routes, etc.;
  - Analyzing collected data with proper statistical models to identify patterns and problems of vehicle utilities in NGOs;
  - Building a generalized "Smart Mobility Model" based on cost and benefit analysis, to help NGOs optimize the vehicle utilities.

Business Intelligence Practicum: Capital Bikeshare Profit Growth Strategies — **Washington, D.C.**
Researcher, presenter; — 09/2017 – 12/2017

- Programmed **Python to perform Support Vector Regression** on rental counts over variables of interest;
  - Optimized the regression model by utilizing **PCA and Grid Search** to extract appropriate features to predict the rental counts;
  - Fitted the model with **Gaussian/Linear kernels**, and tested different "Testing Vs Training" ratios to find the best model;
- Suggested a strategy to focus more on commuters than tourists based on **40% less demand elasticities** for commuters.

Cost-benefit Analysis of a Geothermal System in Gross Hall — **Durham, NC**
Captain*;* ***Client: Duke Facilities Management*** — 08/2015 – 12/2015

- Promoted a geothermal system based on analysis in **Excel analysis** to the client, which **increases energy efficiency by 300%, achieves 260 MWh monthly energy saving** for Gross Hall;
- Presented to the client with an estimation of **a 50-years' NPV of $2.3 million**, based on assumptions of 0.1 annual discount rate and overnight cost of $100 /m².

LEADERSHIP

VP of Membership: The George Washington Consulting Club, Washington, D.C. — 10/2017 – Present
Intern Board: United Nations Economic Commissions for Europe, Geneva, Switzerland — 05/2017 – 08/2017
Captain/Director: Documentaries for Environmental Studies, Durham, NC (https://youtu.be/uIQ4xyWlnv8) — 01/2017 – 04/2017
Official/Referee: Duke Recreation & Physical Education, Durham, NC — 05/2016 – 04/2017