

Education

- UC Berkeley - Master of Information Management and Systems** (GPA: 3.9) 2019 – 2021(expected)
- Focus: Data Analytics, Machine Learning, Data Visualization Berkeley, CA
- Courses: Experimentation and Causal Inference, Applied Machine Learning, Information Visualization, Data Structures and Analytics, Data Mining and Analytics, Information Organization and Retrieval, Urban Informatics
- Georgetown University - Master of Public Policy** (Focus: Environment and Energy) 2012 – 2014
- Thesis on US biofuel policy and global carbon emissions using 2SLS regression analysis Washington, DC
- Courses: Econometrics and Program Evaluation, Statistics, Microeconomics
- Sun Yat-sen University - Bachelor of Management** (Scholarships for Academic Excellence) 2008 – 2012
- Courses: Calculus, Linear Algebra, Project Management, Urban Planning Guangdong, China

Skills and Tools

Programming Python, SQL, Spark, R, STATA

Tools Data Analytics (Jupyter Notebook, Pandas, NumPy), Machine Learning (Scikit-Learn, Tensorflow, PySpark), Visualization (Matplotlib, Seaborn, Plotly, Tableau, Vega-lite, Observable, Illustrator)

Employment History (2013 – 2019 in Washington, DC)

- UC Berkeley, Haas School of Business - Graduate Student Instructor** 2020
- Supervised a core course in Business Analytics which enables students to use data mining, machine learning (e.g. KNN, Classification Trees) and develop optimization and risk assessment models for business decisions
- World Bank (WB), Transport and Digital Development - Sustainable Transport Analyst / Consultant** 2015 - 2019
- Conducted cost-effectiveness analysis of clean bus technologies (i.e. battery, hybrid, CNG, clean diesel) to enable e-mobility in Latin American cities; made presentation at 98th TRB Annual Meeting (biggest US transport conference)
- Authored the implementation completion and results report for a \$200M Urban Transport Project in Lagos, Nigeria, including evaluating the metrics to justify improved mobility and an incremental shift to low-carbon transport
- Designed 12 implementation programs for the federal and city governments in Ethiopia and Kenya to address second-hand vehicles issues (i.e. tailpipe emission, fuel efficiency, road safety and fleet growth)
- World Resources Institute (WRI) - Research Intern, Global Climate Program** 2014 - 2015
- International Council on Clean Transportation (ICCT)** 2013 - 2014
- Research Fellow, Biofuel Program; Research Intern, Heavy-duty Vehicle Program
- Georgetown University - Teaching Assistant, Econometrics** 2014

Selected Publications

- “Motorization Management for Development: An Integrated Approach to Improving Vehicles for Sustainable Mobility” with Roger Gorham, et al. WB. 2019
- “Green Your Bus Ride: Clean Buses in Latin America” with Bianca Alves, et al. WB. 2019
- “Latin America and the Cost Effectiveness of Emissions Reductions from Clean Bus Technologies” with Fiamma Prada, et al. Transport Resources Board (TRB) 98th Annual Meeting, 2019
- “How Can African Countries Motorize Sustainably?” with Roger Gorham. TRB 96th Annual Meeting, 2017.
- “Motorization Management in Ethiopia and Kenya” with Roger Gorham, et al. WB. 2017
- “Review and comparative analysis of in-use vehicle emission control programs in Guangdong Province.” with Zifei Yang, et al. ICCT. 2015

Selected Course Projects

Information Organization and Retrieval

- Designed and built a Pet Adoption Advisory Information System in Python with database of Texas shelter animals
- Conducted data preprocessing, running K-means clustering (yielded 91% accuracy ratio), to interface design and features realization (pet selection, estimating pet raising costs)

Information Visualization and Presentation

- Designed a website as an interactive visualization tool based on tangible flavors (e.g. fruity, floral, herbal, leather, cooking spice) to help wine novices select wines (<https://yinan-chen.github.io/wineproject/>)
- Conducted Exploratory Data Analysis (EDA), visualization design, content writing, user testing and presentation