Websites: denisond.github.io https://www.linkedin.com/in/dakota-denison-1578a5125/ https://github.com/denisond

University of Michigan, Ann Arbor, Michigan September 2013 - May 2017 College of Literature, Science, and the Arts Bachelor of Arts in Economics, minor in Mathematics. June 2016 – July 2016 Waseda University, Tokyo, Japan Economics, Business, and Japanese Courses Wayne State University, Detroit, Michigan September 2011 – May 2013 College of Fine, Performing and Communication Arts Bachelor of Music, Jazz Studies **Professional Experience** MDRC, New York, New York March 2018 - Present Statistical Programmer Writing code in SAS and SQL to clean large datasets-restructuring, missing-data imputation, and standardization. Running hierarchical linear models on nested data to determine impacts from randomized control trials of education policy programs. Preparing graphs and tables to present data distributions, descriptive statistics, and impact findings (i.e. effect size, p-value, etc.) to other data team members. Creating codebooks and technical memos that document data processing decisions and summarize data quality. Department of Economics at the University of Michigan, Ann Arbor, Michigan July 2017 – March 2018 Research Assistant Cleaned and analyzed noisy, heterogeneous cost data sets from the National Residential Efficiency Measures Database. Wrote programs in Stata to predict how consumer decisions to invest in air conditioners, heaters, insulation and windows respond to extreme weather. Produced cost estimates for upgrading durable household investments to technological frontier and other efficiency standards. Private Tutor, Ann Arbor, Michigan August 2015 - May 2017 Tutored other undergraduate students at the University of Michigan. Courses: Calculus I-IV, Linear Algebra, Probability Theory, Real Analysis, Game Theory, and Econometrics II. Allstate Insurance, Farmington Hills, Michigan May 2015 - August 2015 Finance Intern Wrote VBA Macros for master log of spreadsheets that pulled billing data from 1000+ unorganized billing sheets, expediting 80+ hours of claim processors' work every 6 months as well as streamlining daily tasks for the entire MACP department. Collaborated with financial analysts, and leaders in various departments, assisting in the analysis, cleaning, and organization of financial data and daily reports. Denison Consulting, Ann Arbor, Michigan June 2014 - September 2014 Research & Development Intern Led the develop of a social media-based mergers and acquisitions due diligence offering. Performed descriptive and multivariate statistical analyses of clients' culture survey results with SPSS and Python. Prepared, manipulated, and managed extensive normative databases for 50+ companies' culture survey scores. **Personal Projects** NCAA Men's Basketball Elo Rating App (https://denisond.github.io/elo_ratings.html) May 2019 - Present Created Elo ratings for Big Ten Men's Basketball teams for 1985-2018 and built custom Plotly app to display ratings. **Data Science and Investment Strategy Notebooks** March 2019 – Present Notebook for machine learning competition using data viz, imputation, and various regression models to predict house prices. Notebook with investment strategy using Monte-Carlo method to find cryptocurrency portfolios with optimal Sharpe ratios. Live Jazz Calendar Web Application (<u>https://www.nycjazztonight.com/</u>)
Wrote Python code using beautifulsoup4 to scrape data from ~15 popular NYC jazz clubs. January 2019 – Present Used Python packages RegEx and pandas to clean and restructure jazz club data into data frame indexed by date and time. Deployed a Linux server to host Flask web application and execute the web scrapers nightly. **Programming Languages and Tools** Languages: CSS, HTML, LaTeX, Python, SAS, Stata, SQL.

Tools: beautifulsoup4, crontab, Flask, GitHub. Jupyter, Keras, Linux, NumPy, pandas, Plotly, PyCharm, RegEx, scikit-learn, SciPy, Seaborn, SPSS, WinSCP.

Activities

Volunteer for Ann Arbor Public Schools Music Program

Assistant Director

- Instructed small ensembles and jazz orchestras for 50+ youth.
- Gave private lessons for specific instruments (saxophones, clarinet, flute, and piano).
- Used music software to compose, orchestrate, and arrange music for program ensembles.

June 2011 – July 2015