Benjamin Craver

Education

Masters Operation Research, NC State *2018 -> 2019*

B.S. Industrial Systems Engineering, NC State *2014-> 2018*
GPA 3.79 w/ Statistics Minor

Experience

Data Scientist, Boeing *May 2020 -> Present*

- Developed scheduling algorithms to assign mechanics to jobs based on experience
- Formulated Bayesian approach for predicting defects and manufacturing contamination
- Built and deployed dashboard and APIs (Plotly and FastAPI) for customers to consume data

Data Science Intern, Boeing *Summer 2019*

- Built forecasting tools to predict demand of manufacturing supplies
- Researched machine learning models to optimally order supplies based on forecasted demand

Teaching Assistant, NC State *2015 -> 2019*

- ISE589 -Applications of Python in database interaction, data science, and machine learning
- ISE519 -Designing applications and databases using VBA and SQL, emphasis on query design
- ISE110/135 -Programming VBA/Python macros in Excel with emphasis on algorithm development

Research Assistant, DIME Lab @ NC State *2017 -> 2018*

- Researched automation and smart-contract applications with integrated machines
- Built a web scraper and document classifier in Python

University Projects

- Senior Capstone: Shuttle Transportation Analysis and Optimization for Boston Public Schools
  - Collaborated with a team of five to optimize bus routes by minimizing ride times for students using tools such as SAS, ArcGIS, Python, and Google APIs to gather data, calculate travel times, and design routes. Presentation can be found by clicking **here**.
  - Our team won best ISE Senior Design Project as judged by colleges, professors, and alumni
- Developed stochastic model of returns for Lenovo to find process errors and product defects
- Built simulation model of global logistics system to optimize facility placement using SIMIO

Technical Skills

Languages/frameworks/packages I have used recently:

- Python, Git, SQL, Pandas, Numpy, Plotly, Dash, FastAPI, PostGreSQL

Languages/frameworks/packages I used in the past:

- Google ORTools, CPLEX, Scikit-learn, VBA, SAS, R, Java, JavaScript

Relevant coursework in mathematics:

- Stochastic models, linear programming, machine learning, deep learning, regression analysis, design of factorial experiments, actuarial science, and statistics for quality control

Miscellaneous Things

- I studied at Seoul National University for a semester. While there, I took courses on International Finance, Finite Element Analysis, Aesthetics, Game Theory, and Korean Politics.
- I'm in the process of getting a Data Engineering Nanodegree from Udacity.
- I'm an avid reader, here are some books of note: Adaptive Markets, Algorithms to Live By, Antifragile, Flash Boys, (Mis)Behavior of Markets, Prediction Machines, Power of Habit, Radical Markets, Sapiens, Superforecasting, Thinking Fast and Slow, & Thinking in Systems.