Alexander McWilliams

104 Edgefield Dr. | Morris Plains, NJ 07950 | (917) 488-4276 | mcwilli_alex@bentley.edu | https://xndrmcw.netlify.app/

EDUCATION|

Bentley University, Waltham, MA
Candidate for Bachelor of Science, Data Analytics, May 2021
Major G.P.A. 3.68
Honors: President's List (3.7+ GPA), Dean's List (3.5+ GPA); Honors Program

PROFESSIONAL EXPERIENCE|

Bentley University, Waltham, MA   Sept 2020 - Present
Natural Language Processing (NLP) Researcher
- Developed a comprehensive research project focused on text analysis & Natural Language Processing
- Analyzed reddit.com comment data with R-Studio packages textmatch and quanteda to gauge sentiment based on presumed user gender. Attempting to predict upvote/downvote ratio using summary statistics.

Tiffany & Co., Parsippany, NJ   May 2019 – July 2019
Operations Associate
- Utilized RF Scanner technology to communicate inventory status to Tiffany & Co. WMS, keeping a detailed record of production and units to ensure an efficient flow of operations in the warehouse
- Worked on a closely knit team to train new hires in the "merchandising preparation" program, where we oversaw the ship-to-store readiness of items ranging in price from $500 - $300,000

RELEVANT COURSEWORK|

MA252 – Regression Analysis   Fall 2019
- Constructed multiple regression and time series models using K-Fold/Leave One Out/Holdout machine learning cross validation methods. Analyzed model residuals.

MA255 – Design of Experiments
- Collaboratively designed factorial and fractional experiments to determine main effects of variables of concern.

CS350 – Database Management Systems   Spring 2020
- Competed, with a small team of students, in a section wide Oracle modeling competition, using Homestay's user data.
- Explored the theoretical and practical aspects of DB management utilizing ERD and EERD mapping diagrams, ascribing relationships (one-to-many, many-to-many,) to different portions of the database structure

TECHNICAL SKILLS|

Software & Programming Languages – Python (NumPy, Pandas, SciPy, Plotly, CV2) SQL, NoSQL, R, R-Studio, Excel, Adobe Photoshop/Premiere, HTML, Dash, Hugo, Netlify

SUMMER 2020 PROFESSIONAL DEVELOPMENT| (DUE TO COVID-19)

- Committed approximately 20 hours per week to Berkeley's CS61a – 'Structure and Interpretation of Computer Programs' course to strengthen my Python fundamentals and learn more about Computer Science as a whole
- Read approximately 15 books from varied genres to strengthen my personal and professional self, including:
  - J. D. Salinger's *Catcher in The Rye*, a classic bildungsroman I'd somehow never picked up before
  - David Schwartz's *The Magic of Thinking Big,* discover a new lens on 'thinking big' & setting oneself up for success

LEADERSHIP/EXTRACURRICULAR EXPERIENCE|

Haptics Research Assistant - Bentley University   (2019-Present)
- Currently exploring the effects of a user's artistic experience of touch using Tanvas, a sophisticated touch-screen device that allows users to ascribe custom levels of friction to predefined areas of the device

Resident Assistant - Bentley University   (2019-2020)
- Connected with residents on an interpersonal level, facilitating a healthy and engaging floor environment

Tour Guide - Bentley University   (2018-2019)
- Showcased Bentley University while practicing oral and presentation skills in front of groups of perspective students