

VIVIAN YOUNG

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EDUCATION

Master of Business Administration (MBA), concentration in Business Analytics, University of Texas at Dallas Dec. 2023

- Relevant Courses: Programming for Data Science, Predictive Analytics for Data Science, Prescriptive Analytics, Modeling for Business Analytics, Causal Analytics and A/B Testing, Object Oriented Programming with Python, Statistics and Data Analysis

Bachelor of Science in Mechanical Engineering (BSME), minor in Mathematics, Baylor University

- Relevant Courses: Linear Algebra, Probability and Statistics

SKILLS

Programming Languages: Python, SQL, R, HTML, Java, C, MATLAB

Libraries & Frameworks: Pandas, NumPy, Scikit-Learn, Matplotlib, Seaborn, TensorFlow, Keras, Spark, Flask, SQLite, REST API

Tools & Methods: Tableau, Power BI, Splunk, Databricks, SAS, Microsoft Excel, Postman, Git, A/B Testing, Statistics, ETL

EXPERIENCE

Computer Vision Engineer/Sr. Software Engineer, BNSF Railway, a Berkshire Hathaway subsidiary Sep. 2022 – present

- Leads design and development of machine learning/artificial intelligence solutions and models for enterprise computer vision systems, resulting in millions of dollars in cost savings through prevention of derailments
- Programs model integrations and performs data analysis using Python, SQL, Tableau, and Microsoft Excel
- Develops prototypes and proof of concepts that assess viability of computer vision to solve business problems
- Interfaces with AI vendors and identifies new technologies that can be leveraged to improve existing processes
- Supervises team of 5-10 image annotators

Product Owner/Sr. Business Analyst, BNSF Railway, a Berkshire Hathaway subsidiary Oct. 2021 – Sep. 2022

- Acted as liaison between business leadership, customers, and software developers for web application in Agile team
- Managed product roadmap, prioritized backlog, defined product requirements, and oversaw User Acceptance Testing
- Programmed front-end and back-end features and enhancements using Java, React, SQL, and REST API
- Continued work and responsibilities from previous role as Data Analyst/Sr. Business Analyst in parallel

Data Analyst/Business Analyst, BNSF Railway, a Berkshire Hathaway subsidiary Aug. 2020 – Oct. 2021

- Developed data-driven solutions and recommendations across multiple business domains as part of an internal consulting team
- Performed ETL and rapid analytics with production-level reports, dashboards, and recommendations delivered within weeks
- Leveraged technologies such as SQL, Python, Tableau, Power BI, Databricks, Spark, Splunk, Azure Machine Learning
- Presented and communicated analytical insights regularly to non-technical executive audiences up to the Vice President level

Management Trainee & Mechanical Manager/Foreman, BNSF Railway, a Berkshire Hathaway subsidiary Sep. 2019 – Aug. 2020

- Led and managed 10 – 30 mechanical craft employees in a 24/7 fast-paced field environment
- Championed the improvement of the Arrival Diagnostic Process (ADP) through creation of ADP dashboard in Tableau

Data Analytics/Mechanical Intern, BNSF Railway, Berkshire Hathaway subsidiary Jun. 2018 – Aug. 2018

- Developed data visualization tools in Tableau that aided in data governance and monitoring of project progress
- Created a protocol for the identification of discrepancies in Mechanical master data and subsequent update in SAP

Biology Research Assistant & B-TRUE Fellow, The Trumble Lab at Baylor University Aug. 2016 – Aug. 2017

- Analyzed the effect of climate change on harbor seals, specifically the viability of using fecal glucocorticoids for analysis and the stress effect of different diets via statistical methods, under the guidance of Dr. Stephen J. Trumble

PROJECTS

Enhancing Positron-Emission Tomography Images with Deep Learning Methods, Baylor University Jan. 2019 – May 2019

- Developed deep learning computer vision AI models in Python using TensorFlow and Keras that allowed for the identification of tumors with 90% accuracy in 3D brain scan images through a convolutional neural network and U-Net

HONORS & AWARDS

Employee of the Year 2021 & Achievement Award, BNSF Railway Dec. 2021

- Awarded for two high-impact accomplishments identified by BNSF's CEO: 1. Development of marketing tool that matched customers' waste by-products for re-use by other customers, improving sustainability and identifying 60+ new revenue opportunities and 2. Leadership in diversity and inclusion efforts in the BNSF Asian/Pacific Islander Network