

VIVIAN YOUNG

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EDUCATION

University of Texas at Dallas

Dec. 2023

Master of Business Administration (MBA) with concentration in Business Analytics

Baylor University

Bachelor of Science in Mechanical Engineering (BSME) with minor in Mathematics, Honors Distinction

SKILLS

Agile/Scrum Methodology, Machine Learning, Computer Vision

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

Data Analytics: Tableau, Power BI, Splunk, Azure, Databricks, Microsoft Excel, SAS

EXPERIENCE

Sr. Software Engineer/Computer Vision Engineer, BNSF Railway

Sep. 2022 – present

- Leads design and development of machine learning/artificial intelligence solutions for enterprise computer vision systems such as THOR, an automated track inspection system, and MIDAS, a mechanical inspection system
- Creates, maintains, and augments computer vision models that process millions of images per day, resulting in improved safety and millions of dollars in savings through early defect identification and prevention of derailments
- Develops prototypes and proof of concepts that assess viability of computer vision to solve business problems
- Supervises team of 5-10 image annotators

Sr. Business Analyst/Product Owner, BNSF Railway

Oct. 2021 – Sep. 2022

- Acted as liaison between business leadership and software engineers for critical web application in Agile development team
- Partnered with business stakeholders and communicated with application end users to drive iterative, high-quality enhancements that met business needs and improved existing business processes
- Performed data analytics for business stakeholders using SQL and Tableau

Business Analyst/Data Analyst, BNSF Railway

Aug. 2020 – Oct. 2021

- Developed actionable, data-driven solutions and recommendations for business problems across cross-functional areas as part of an internal consulting team
- Presented insights regularly to executives up to the Vice President level for iterative, collaborative problem-solving
- Performed rapid analytics with reports and dashboards delivered within weeks
- Leveraged analytical tools such as SQL, Tableau, Power BI, Azure Machine Learning, Splunk

Mechanical Management Trainee & Mechanical Foreman, BNSF Railway

Sep. 2019 – Aug. 2020

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

Mechanical/Data Analytics Intern, BNSF Railway

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

Research Assistant, Laboratory of Ecological and Adaptational Physiology at Baylor

Aug. 2016 – Aug. 2017

- Investigated the effect of climate change on harbor seals, specifically the viability of using fecal glucocorticoids for analysis and the stress effect of different diets, through analysis via statistical methods

PROJECTS

Enhancing Positron-Emission Tomography Images with Deep Learning Methods, UT Southwestern Medical Center

- Programming lead for project and developed tools in Python using Tensorflow and Keras that allowed for the identification of tumors with 90% accuracy in MRI 3D brain scan images through deep learning algorithms

HONORS & AWARDS

BNSF Railway Employee of the Year 2021, BNSF Railway Achievement Award: Awarded for the following:

- Development of Marketing tool that matched customers' waste byproducts for re-use by other customers, which improved environmental sustainability and identified new revenue opportunities