

# VIVIAN YOUNG

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## EDUCATION

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### University of Texas at Dallas

Dec. 2023

Master of Business Administration (MBA) with concentration in Information Technology Management, GPA: 3.8/4.0

### Baylor University

May 2019

Bachelor of Science in Mechanical Engineering (BSME) with minor in Mathematics, Honors Distinction, GPA: 3.6/4.0

## SKILLS

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**Agile/Scrum Methodology, Machine Learning/Machine Vision**

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

**Data Analytics:** Tableau, Power BI, Splunk, Azure, Databricks

## EXPERIENCE

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### Sr. Software Engineer/Computer Vision Engineer, BNSF Railway

Sep. 2022 – present

- Develops machine learning/artificial intelligence models for Track Health Optical Recognition (THOR), an automated computer vision track inspection system
- Develops proof of concepts and solutions that integrate computer vision with edge and cloud systems for business problems

### 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
- Drove the overall vision of the application by partnering with business stakeholders and communicating with application end users to drive iterative, high-quality enhancements that met business needs and improved existing business processes
- Managed and prioritized backlog, defined product requirements, and oversaw User Acceptance Testing
- Coded front-end and back-end features and enhancements using Java, React, SQL, and REST API

### Business Analyst, BNSF Railway

Aug. 2020 – Oct. 2021

- Developed actionable, data-driven solutions and recommendations for business problems as part of internal consulting team
- Presented insights regularly to executives up to the Vice President level for iterative, collaborative problem-solving

### Mechanical Management Trainee & Mechanical Foreman, BNSF Railway

Sep. 2019 – Aug. 2020

- Led and supervised 10 – 30 mechanical craft employees in a fast-paced field environment at Temple Locomotive/Car Shop
- Championed the improvement of the locomotive Arrival Diagnostic Process (ADP) through creation of ADP dashboard
- Advocated for employees and implemented safety/facility improvements based on employee feedback

### Mechanical Engineering Intern, BNSF Railway

Jun. 2018 – Aug. 2018

- Developed data visualization tools in Tableau that aid 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 and the viability of fecal glucocorticoids for analysis
- Selected as one of 10 research fellows for the first Baylor Transdisciplinary Research Undergraduate Experience (B-TRUE)

## PROJECTS

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### Enhancing Positron-Emission Tomography Images with Deep Learning Methods, Baylor University

- Programming lead for project sponsored by UT Southwestern to examine medical images through artificial intelligence
- Programmed 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

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

- Development of Marketing tool that matched customers' waste byproducts for re-use by other customers, which improved environmental sustainability and identified new revenue opportunities
- For leadership in diversity and inclusion efforts as Events Co-Chair for the BNSF Asian/Pacific Islander Network, organizing collaborative, all-inclusive cultural events that totaled over 700 attendees