

Ziyu Han

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Process Improvement | Business & Data Analytics | Project Management

EDUCATION

UNIVERSITY OF MICHIGAN

Ann Arbor, MI

Master of Science in Engineering in Industrial and Operations Engineering

May 2024

- **Cumulative GPA:** 3.99/4.00

Honors Bachelor of Science in Engineering in Industrial and Operations Engineering

May 2023

- **Cumulative GPA:** 3.84/4.00

SKILLS

- **Data Analysis & Visualization:** Python, SQL, R, SAS, Tableau, Power BI, Minitab, Orange, Pandas, NumPy, Seaborn
- **Business Analysis:** Agile Methodology, Requirements Elicitation, Functional Analysis, Systems Thinking, User Story Mapping, UAT Testing, SWOT Analysis, Porter's Five Forces, PESTEL Analysis, SIPOC Diagram, Swimlane Diagram
- **Process Improvement:** Lean Six Sigma, Root Cause Analysis, Value Stream Mapping, DMAIC, Bottleneck Analysis, Benchmarking, Kaizen, Process Family Matrix, Kanban, Fishbone Diagram, Poka-Yoke, SMART Goals
- **Project Management:** Jira, Confluence, Asana, Visio, MS Office, Stakeholder Analysis and Management
- **Technical:** SQL Server, PostgreSQL, MySQL, Snowflake, Git, GitHub, Azure, Power Automate, VBA, C#, JavaScript

PROFESSIONAL EXPERIENCE

Ontario Public Service - Ministry of Public and Business Service Delivery and Procurement

Toronto, ON

Data Engineer

September 2024 – Present

- Developing a serverless Generic Data Collection Tool application that reduces data processing time by **80%** and supports **10,000+** concurrent users, using **C#**, **ASP.NET Core MVC**, **Azure PaaS and SaaS services**, and **Redis Cache**.
- Collaborated with internal and external stakeholders to automate data management systems for various healthcare financial reports using **VBA** and **JavaScript**, enhancing data accessibility and reducing data validation time by **95%**.
- Translated business requirements and user stories into functional use cases for tool implementation and executed test cases, ensuring alignment with business rules and reducing system defects by **35%** through rigorous **UAT testing**.

BizData Analytics Solutions Inc.

Richmond Hill, ON

Data Analyst

May 2024 – Present

- Analyzed **73,600+** credit risk records using **Python**, **SQL**, and **SAS** to establish risk mitigation strategies for Verizon's postpaid mobile applications, minimizing credit score risk and raising approved accounts and activation rates by **68%**.
- Built **Python**-based regression and seasonal sales forecasting models for shampoo product performance, achieving **99%** accuracy in sales and gross margin predictions, informing pricing strategies, and improving business KPIs by **55%**.
- Optimized fleet maintenance operations for **5,500+** vehicles in Toronto by identifying cost-effective vehicles across light, medium, and heavy-duty groups, reducing operating costs by **46%** and delivering actionable recommendations.
- Led cross-functional teams to develop dynamic **Tableau** and **Power BI** dashboards and reports, empowering diverse stakeholders with clear visuals of key performance metrics to drive decision-making and achieve business objectives.

Canam Steel Corporation

Point of Rocks, MD

Process Improvement Analyst

May 2023 – August 2023

- Engineered advanced job order scheduling and sequencing optimization models in **Python** for steel joist production, increasing plant efficiency by **34%** through optimized tonnage throughput, reduced changeover times, and minimized job lateness and contributing to **\$4 million** in annual labor savings and **\$24 million** in additional annual revenue.
- Developed ETL scrapers using **Python** to centralize joist data from job order documents and enhanced the Routing Dashboard to outline job order production flows, preventing overload and improving operational efficiency by **94%**.
- Leveraged **SQL** to query **79,500+** production data records and conducted time studies at bottleneck workstations, validating joist completion times, minimizing process variance, and identifying lean waste reduction opportunities.

Akex Solutions

Richmond Hill, ON

Business Analyst Intern

June 2022 – August 2022

- Developed inventory automation processes using **Python** and **VBA** to streamline daily updates and validation of a 2,000+ SKU database and product webpage, while extracting live product data from three online auction platforms, enabling data-driven purchasing decisions, optimizing requisition workflows, and strengthening vendor relationships.
- Formulated automated FTP-based ETL pipelines in **VBA** to aggregate and process multiple procurement databases, reducing data reporting time by **85%** and enabling real-time performance monitoring for efficient decision-making.