Education

Industrial and Operations Engineering B.S.E University of Michigan Ann Arbor GPA 3.36/4.00 Graduation: Dec 2019

Departmental Scholarships: Myun Lee Scholarship in Human Factors, Walton Hancock Scholarship for Manufacturing

Industry Experience

Microsoft

Decision Sciences, Program Manager

Starting Feb 2020

- Maintains and builds data pipelines in R and python for multi-echelon inventory optimization buffer planning models used by all Microsoft cloud datacenters
- Developing OR models for customer offer restrictions and supply variability

Cloud Supply Chain Planning Intern

Summer of 2019

- Built a regression model to capture infrastructure power needs for all Microsoft datacenters using sku power ratings, supply and demand data, colo attributes, and networking inventory
- Automated the regression model's training/testing, data validation, feature selection, and diagnostic plotting using R and SQL via databricks
- Deployed the regression model into production systems with the new model reducing planning delays for 112 datacenter clusters (average 13 server racks per cluster)

Cummins

Supply Network Operations: Manufacturing Intern

Summer of 2018

Six Sigma project outcomes:

- Identified and ordered \$326k worth of critical tooling and spares to resolve inventory bottlenecks
- Implemented a statistical reorder point algorithm for tooling and spares, reducing part related downtime of bottleneck assets from 875 hours in May to 500 hours in July and August
- Deployed a data model into production and created live dashboards for the reorder point algorithm to automate processes.

DTE Energy

Gas Operations Co-op

Summer and Fall of 2017

- Piloted a contractor gas pressure testing process that used SharePoint app workflows
- Implemented a SharePoint database and interface across gas operations to document engineering defects with 500 unique defects entered by engineers and contractors upon creation
- Created automated metrics, workflows, and embedded escalations to track problem solving for the defect database, reducing the 6 mo. rolling defect closure rate for safety defects from 110 days to 78 days
- Standardized financial templates for the DTE Gas organization

Research/Project Teams

University of Michigan Transportation Research Institute

Research Assistant

2018-2019

- Human factors research using naturalistic driving data under Dr. Shan Bao
- Data wrangling, image classification, visualization, and statistical modeling using SQL and R
- Recipient of the Myun Lee Scholarship in Human Factors

University of Michigan Concrete Canoe Project Team

Hull Design and Structural Analysis Lead

2015-2017

- Recruited and led a hull design and structural analysis team of seven people
- Designed a concrete canoe hull by optimizing shape, improving max speeds by 17% to 27%, and GM stability by 23% to 48% for all load cases over the previous design
- Designed and cut a 15 feet long foam mold to hold the concrete as the canoe cured