JOY CHANG

EDUCATION

University of Michigan - Ann Arbor   **2017 - 2018**
Master of Science in Engineering - Industrial & Operations Engineering

University of Michigan - Ann Arbor   **2015 - 2017**
Bachelor of Science in Engineering - Industrial & Operations Engineering

PROFESSIONAL EXPERIENCE

3M Co.   **Nevada, MO**
Optimized Operations Engineer   *July 2019 - November 2019*
- Managed production of overlaminate films ($50M in annual sales).
- Reduced on-hold inventory from $300K to $160K in four months.
- Conducted ad-hoc analytics using SQL, R, and Power BI to identify defect trends.

3M Co.   **St. Paul, MN**
Optimized Operations Engineer   *July 2018 - July 2019*
- Led statistical validation for product scale-up of sign-printing inks ($1M sales in 2019).
- Created dashboard to control brightness variability of license plate molds.
- Developed standard procedure for quality control in Transportation Safety Division.

University of Michigan   **Ann Arbor, MI**
Graduate Student Instructor   *August 2017 - May 2018*
- Coached 19 student teams on healthcare engineering projects at the University of Michigan Health System.
- Taught optimization, computer programming, statistics, and lean tools.

Cummins, Inc.   **Columbus, IN**
Supply Chain Systems Intern   *May 2016 - August 2016*
- Helped deploy supplier dashboard to all sourcing managers.
- Developed scoring methodology and best practice procedures through user interviews.

SKILLS

Computer Languages: SQL, R, Python, Microsoft Excel (VBA)

Publication: "Location design and relocation of a mixed carsharing fleet with CO_2 emission constraint," Service Science, 9(3), 205-218, 2017. Chang, J., Yu, M., Shen, S., Xu, M.
- Network flow model applied to car-sharing transportation systems. Linear optimization program written in Python and Gurobi.
- Awarded INFORMS Undergraduate Operations Research Prize (2016).