# **Rachel Divinagracia**

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#### **EDUCATION**

University of Michigan | MSE Industrial & Operations Engineering
General member of Graduate Society of Women Engineers | GPA: 3.56
University of Michigan | BSE Industrial & Systems Engineering
Dean's List | IMSE Department Honors Scholar | GPA: 3.71

#### **EXPERIENCE**

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- Assisted students, staff, and faculty in maintaining general function of campus computer labs and classrooms A/V technology through the use of regular audits and reports.
- Trained new members on how to perform routine audits as well as how to use Team Dynamix.

# Daifuku Airport America Corp. | Controls Engineering Intern | May 2022 - August 2022

- Provided support in commissioning variable frequency drives and benchmarking airport conveyor belts to ensure standard operational performance.
- Used electrical and part drawings as well as controls graphics to troubleshoot and resolve conveyor belt issues.

## Ford Motor Company | Craftsmanship Summer Intern

**July 2020 – August 2020** 

- Analyzed previous vehicle audits to gain valuable insights into the benchmarking process.
- Conducted numerous remote virtual total vehicle audits, evaluating adherence to quality standards in comparison to in-person audits.

## **Ford Motor Company** | *R & D Summer Intern*

**June 2019 – August 2019** 

- Used MATLAB, HyperMesh, and Abaqus to create models and run 2-D simulations of clutch friction plates.
- Used MATLAB and PowerPoint to create statistical figures to illustrate both empirical and simulation data for a SAE-published technical paper.

#### **PROJECTS**

## Pharmacy Layout Redesign and Efficiency Improvement

**October 2022 - April 2023** 

- Worked in a team to propose recommendations for a local pharmacy to enhance efficiency and productivity based on data-driven insights following the DMAIC process
- Developed discrete event simulation models in ARENA to implement and statistically evaluate the effectiveness of the proposed layout changes.
- Received an Honorable Mention Award from the University of Michigan Dearborn Industrial & Manufacturing Systems Engineering Department

#### **SKILLS & ABILITIES**

**Programming languages**: Java, Python (including gurobipy, sci-kit learn), MATLAB, R. **Software skills**: ARENA simulation software, AMPL, CATIA, Microsoft Excel (Analysis Toolpak, solver), Microsoft Word, Microsoft PowerPoint, Jupyter Notebook, Jack Simulator.

Other skills: Analysis of variance, control charts, data collecting and pre-processing, design of experiments, ergonomic assessments, facilities layout algorithms, inventory management, lean and six sigma, linear programming, linear regression modelling, 10-hour OSHA certification. risk evaluation and decision analysis, time series and forecasting.