

TIFFANY YUAN

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EDUCATION

Rice University, Houston, TX

Master of Science in Industrial Engineering(GPA 3.91/4.0)

expected Dec 2020

National Chiao Tung University, Taiwan, Hsinchu

Bachelor of Science in Industrial Engineering and Management

July 2019

RESEARCH EXPERIENCE

General Inverse Markov Decision Process (GIMDP) Model, University of Houston, May. 2020 - present

- Implemented a GIMDP model using Python and Gurobi to find the optimal policy and optimal reward function based on the noisy (input) actions.
- Extended the model to the finite-horizon version so that GIMDP has more practical applications.
- Currently searching a proper measurement to demonstrate the difference of the performances between IMDP and GIMDP.

RELATED PROJECTS

Capstone Project, SunNet/Rice University, Houston,

Nov. 2019 - present

- Identified SunNet's possible problems regarding the N-sided platform.
- Currently designing the price strategy and proper connecting ways of the different sides to assist Sunnet in making profit.

Coffeeshop Value Chain Management, Rice University, Houston,

Nov. 2019

- Calculated and forecasting the demand of specific inventory(milk) the coffee shop runs out often with statistical survey and the sale record to solve the stockout.
- Applied value chain concept by evaluating their process from inventory to the customer end, and suggested the coffee shop a better policy to improve its performance.
- Demonstrated strong negotiating skill during communication with the coffee shop managers.

Bluetooth Beer Game, National Chiao Tung University, Taiwan,

Aug. 2017 - Aug. 2018

- Built up an APP modeling supply chain to enhance students' understanding by practical operation
- Improved programming languages including JAVA and Python

Campus Restaurant Simulation, National Chiao Tung University, Taiwan,

Aug. 2016

- Built up a model using Flexim to simulate and analyze the campus restaurants' performances.
- Provided advice to the restaurants in order to help them improve their performance.

RELEVANT COURSEWORK

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| • Simulation and Modeling | • Mathematical Probability | • Continuous Optimization |
| • Prescriptive Analysis | • Manufacturing Process | • Supply Chain Management |
| • Operation Research | • Statistical Inference | • Human Factor |
| • Decomposition approach in large-scale optimization | | |

EXTRACURRICULAR ACTIVITIES

Executive, Documentary "Step in Love",

June 2016 – August 2017

- Filmed a documentary of dancing flash-mob at four cities in Taiwan
- Enhanced leadership and management skill through recruiting members and planning schedules