# XINYI XU

# Data Analytics student seeking Summer 2021 internship



## **EDUCATION**

2020-Current **Tufts University** MS in Data Analysis

Medford, MA

2016-2020

Pennsylvania State University

B.S. in Mathematics B.E. in Computer Science State College, PA



# ♣ SELECTED PROJECT EXPERIENCE

2020

### DATA-200 Foundations of Data Analyics

**Tufts University** 

Medford, MA

• Deployed a project which predicted the possible town-level factors that affect COVID-19 rates in Massachusetts.

2018

#### An Application of the Primal and Dual Linear Programming Pennsylvania State University State College, PA

- Maximize the Benefit of a Company with Limited Machining and Raw Materials.
- Set up a linear programming (LP) in Mathemarica, and wrote a function to repeat the process of choosing pivots by Simplex Algorithm to optimize LP in finitely steps so that solved the optimal solution about the amount of materials.
- Established the dual of Primary LP, obtained the unit price of machining and raw materials when the company got the maximum profit, and compare the unit price to determine whether it was more profitable or not to invest more if additional machining time and raw materials were available (unit price was known).

2017

### The Optimization of Dfs (Depth First Search) Algorithm Pennsylvania State University State College, PA

- · Applied C programming to optimize DFS by pruning.
- In a minimum problem, reduced the number of Search Tree's branches according to the estimated lower bound of the current node in order to get the optimal solution or better solution faster.
- · Attempted to optimize the time complexity of the algorithm, such as local search and double nested query.



## CONTACT INFO

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# **SKILLS**

Experienced in running multivariate regression.

Wrote production-level R/Python/Matlab

Performing data analysis, with a focus on engineering models

Machine Learning on R/Python