### Li Tian

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#### **EDUCATION**

The College of Wooster, Wooster, Ohio

09/2018-05/2022

B.A. of Mathematics

• **Cumulative GPA:** 3.6/4.0

• **Skills**: Python, Proficient in using R Studio

#### **WORKING EXPERIENCE**

#### Everbright Securities, Beijing, Research Institute

10/2022-

- Deepened my understanding of financial knowledge through sorting out information of different banks as well as the tier1 asset and tire 2 asset
- Collected relevant information about the Lehman Brothers bankruptcy and Western National Bank (WNB) to analyze whether the US government invoked the orderly liquidation fund (OLF) to save them
- Analyzed foreign pension mechanism including defined benefits and defined contribution, summarized all details of the information
- Made a summary of the third quarter's performance reports regarding PICC, Bank of China and Agricultural Bank of China

### **CPCEP Company, China, Intern**

06/2019

Managed exhibitions for company

Used Microsoft office to create meeting materials for introductions of different energy saving websites

#### **ACADEMIC EXPERIENCE**

**Real Analysis MATH-332 Final Paper** 05/2022

- Showed the details of proving Rolle's Theorem and Mean Value Theorem
- Used one application example to show how to use the Mean Value Theorem to prove an inequality problem

### Investigating the Actors Scheduling Problem using the Branch and Bound Algorithm

03/2022

- Introduced useful knowledge of the branch-and-bound approach, double-ended search, dominance rules, and dynamic programming techniques to solve film scene scheduling problems
- Combined those approaches, rules, and techniques to an enhanced algorithm in order to save the storage of computations and reduce redundant computations
- Used computer science pseudo-code to represent logic of the algorithm

Four Victories by the Nine-tailed Fox 02/2021

- Analyzed why the win rate for each champion was not exactly 50%, simulated the probability of the number of the player uses specified champion until win four times of the game
- Introduced random variable and sample space, constructed probability mass function to describe the given problem, visualized the probability mass function using R

Kirchhoff Theorem (Matrix Tree Theorem) 04/2021

- Investigated the Kirchhoff's theorem (matrix tree theorem) by explaining the related concept, illustrating with examples, and applying it to the real-life example
- Used Graph G to explain the concept of the Laplacian Matrix
- Introduced the Cauchy-Binet formula to prove the matrix tree theorem

Investment Strategy

11/2020

- Maximized the client's revenue, used linear programming to analyzed different situations for giving appropriates suggestions to clients, solved linear programming by doing sensitivity analysis
- Assumed that the client's risk index could be increased to 0.055 and found out the influence on the firm's recommendation and the yield result

- Used binomial distribution to obtain the probability, used the recursive sequence, plotted the barplot with R
- Derived that the probability of the susceptible individual that did get infected by all infected individual
- Used recursive function with extra condition, modified model by fitting the changing behaviors into the model

### **ACTIVITIES**

Chinese Teaching Assistant, the College of Wooster

# 05/2019-05/2020

Helped many foreign classmates to learn Chinese and make friends with them

## **Talent Show, the College of Wooster**

Choreographed and Danced for representing Chinese cultures in the talent show

10/2018 - 11/2018

# **OTHERS**

**Language:** English, Mandarin, French (elementary)

**Interest:** Movies and video games