

# Jian Lu

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## EDUCATION

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**Williams College**, Williamstown, MA

August 2015 - Present

Bachelor of Arts in **Math** and **Computer Science**, May 2019, GPA- 3.45

**Perry Hall High School**, Baltimore, MD

August 2011- June 2015

SAT Reading 710, SAT Math 770, SAT Math-II 780 ACT-34

## Relevant Courses

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Taken: Introduction to Python, Data Structures, Computer Organization, Algorithms, Discrete Maths, Theory of Computation, Programming Languages, Operating Systems, Auto-Graders

## EXPERIENCE

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**Tortoise Investment Management**, *Summer Analyst*

June 2018 – Present

- Researched the methodology and sustainability of ESG funds for clients wishing for socially responsible portfolios
- Analyzed client profiles and portfolios to develop their appropriate risk allocations
- Utilized excel and bloomberg terminal to delve into different funds and their specific holdings and sector weights
- Learned about asset allocation, behavioral finance, active vs. passive, equities / bonds
- Implemented a web-crawler to pull in fund expense ratios and global exposure ratios

**Vicious Syndicate**, *Software Engineer*

March 2017 – April 2018

- Wrote functions to data mine large datasets and formatted data into dictionaries for easier data manipulation
- Used Python, Javascript, Flask, HTML and SQL to create a website, data collector, and a database
- Created the first mulligan simulator app, a tool for beginner to intermediate level players to practice the mulligan

**Spring Education Event- Jane Street**, *Quantitative Trading Program*

April 2017 – May 2017

- Learned about general trading terminology, and got exposure to various market making strategies
- Observed traders during opening hours on the trading floor to better understand their role within the firm
- Improved problem solving abilities through exercises in mental calculations, calculating probabilities and expected values, and game theory
- Utilized Excel in a quantitative setting in order to predict Chevron stock prices based on Exxon prices

## ACTIVITIES

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**Discrete Math/ Introduction to Data Structures**, *Teaching Assistant*, Williamstown, MA

August 2018 – Present

- Taught review sessions and held office hours for peers in need of assistance on course materials covering combinatorics, elementary number theory, discrete maths
- Ran lab classes and assisted helping other students understand computer science concepts, and taught fundamentals in data structures and to reason through and debug code

## PROJECTS

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**Infection**, *Momath Hackathon 2018*, Javascript

- Utilized an SDK provided by the National Museum of Mathematics to code a game for their touch screen floor

**Tropical Cryptography**, *Tropical Geometry Final Project*, Python

- Coded the classic encryption method using tropical linear algebra under the min/plus operations

**FracVisual**, *Fractal Analysis*, RShiny

- Created an app that takes in an iterated fractal system, and visually shows the birth of the fractal image

**F-Tropical**, *Programming Language*, R- Package

- Created a basic programming language that comprising of a parser and interpreter to graph tropical polynomial curves

## SKILLS

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**Language:** Fluent in Cantonese, Proficient in Mandarin

**Technology:** Proficient in the use of Excel, Word, Powerpoint, Python, Java and R.