

# Linsheng Zhuang

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## Education

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### National University of Singapore

Institute of Operations Research and Analytics. Ph.D Student in Operations Research Aug 2020 – Present

### Peking University

HSBC Business School. Master in Economics Aug 2017 – June 2020

School of Economics. Bachelor in Economics Aug 2013 – June 2017

## Experience

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**Research Assistant**, Sargent Institute of Quantitative Economics and Finance, PHBS Summer 2018

- Worked with Nobel Prize laureate Professor Thomas Sargent on a project about U.S. national bonds during the Civil War, manipulating historical financial data to draw reasonable conclusions.
- Implemented a macroeconomic DSGE model for Professor Jun Nie, who currently works for the Federal Reserve of the United States.

**Internship**, National University of Singapore IORA, Singapore Summer 2019

- Model the dissemination of swine flu by considering the game against vigilance in a dynamic setting and approximate the optimal solution using the perturbation method.

**Internship**, PriceWaterhouseCoopers (PwC), Shenzhen and Guangzhou Summer 2017

- Audit the ledger of China Resources Power (CR Power) and polish their financial report.

## Downloadable Paper

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Zhuang, Linsheng and Chen, Zhi and Keppo, Jussi, (August 19, 2024), The Impact of Tie Intervals on Rank-Based Contests. (submitted to *Games and Economics Behavior*)

## Projects

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**Linear Programming Solver** lp\_solver

- An implementation of the Simplex algorithm for linear programming in pure ANSI C.
- Tools Used: C, CMake

**General-purpose Data Structure Library in Pure C** tds

- A general-purpose data structure library implemented in pure ANSI C.
- Tools Used: C, CMake, BLAS, LAPACK

**Custom Programming Language** tapas

- Tapas is a programming language designed to be embedded in C++. It is a fast, lightweight, header-only alternative to similar languages like Lua.
- Tools Used: C, C++, Eigen, CMake

## Technologies

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**Languages:** C, C++, Python

**Technologies:** Numerical analysis; mathematical modeling.