Linsheng Zhuang

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Education

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 School of Economics. Bachelor in Economics Aug 2017 – June 2020 Aug 2013 – June 2017

Experience

Research Assistent, 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

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

Linear Programming Solver

lp_solver

- An implementation of the Simplex algorithm for linear programming in pure ISO C90 standard.
- Tools Used: C, CMake

General-purpose Data Structure Library in Pure C

tds

- A general-purpose data structure library implemented in the pure ISO C90 standard.
- 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

Languages: C, C++, Python

Technologies: Numerical analysis; mathematical modeling.