

Ari Gestetner

 github.com/ariges770 |  gestetnerari@gmail.com |  linkedin.com/ari-gestetner

Education

Monash University | Melbourne, Victoria, Australia

Bachelor Commerce and Science in Mathematical Foundations of Econometrics, Mathematics and Computational Science

Est Grad 2026

- Awarded with summer and winter vacation research scholarships
- First place in an IMC algorithmic trading competition for Monash students hosted by Monash Association of Coding (MAC)

GPA: 3.06/4 | WAM: 75.15

Experience

Teaching Associate

Feb 2024 - Present

Monash University

- Achieved 89% student satisfaction rating exceeding the faculty average of 82% by providing engaging, individualised and interactive classes and explanations
- Collaborated with fellow TAs to deliver applied classes, sharing feedback to drive continuous teaching improvements and enhance student learning outcomes

Research Scholarships

Monash University

Nov 2024 - Feb 2025 - Dr. Buser Say

Python, SCIP, Constraint Programming

- Continued extending SCIPPlan to allow users to provide a system of odes to be solved and used in the planning process supporting engineers and physicists in their work
- Incorporated function interpolation, introducing flexibility to the planning process and allowing for more complex problems to be solved

Jul 2024 - Dr. Buser Say

Python, SCIP, Constraint Programming

- Developed SCIPPlan+, an automated planner for discrete and continuous time planning problems with stochastic domains
- Researched the applications and performance of SCIPPlan+ over a variety of domains

Nov 2023 - Feb 2024 - Dr. Buser Say

Python, SCIP, Constraint Programming

- Refactored and extended [SCIPPlan](#) an automated planner for continuous time sequential planning problems over non-linear domains
- Assessed the performance of SCIPPlan in identifying optimal plans by formulating diverse problems with non-linear constraints
- Successfully derived feasible optimal solutions for a novel problem within a reasonable time frame

Jul 2023 - Dr. Buser Say

Python, Cplex, Gurobi, Seaborn, MILP

- Investigated various linear programming constraint formulations based on neural network transition functions
- Benchmarked and presented different solvers and formulations finding results of over 2x decrease in solve time

Projects

Finance API

Python, FastAPI, PyTest, BeautifulSoup

- Designed, implemented and hosted using serverless hosting an API which fetches stock information, financial statements and currently listed options
- Utilising multithreading, scraped statements from multiple tables leading to up to a 5x increase in speed
- Constructed a Google Sheets add on to pull data into the spreadsheet, being used for over \$15,000 in investments
- Implemented unit testing using pytest in order to provide stability and reliability on future features and versions

Stock Paper Trader

Python, Flask, SQLAlchemy, PostgreSQL, HTML, CSS, Bootstrap

- Built a CRUD app which allows users to make imitation stock transactions to aid in investing education
- Hashed user passwords on registration in order to prevent malicious actors from accessing the private data
- Utilised my "*Finance API*" to retrieve financial data to display and create stock sales and purchases

Technical Skills

Languages: Python, R, C/C++17, Javascript, SQL, HTML/CSS

Frameworks: Flask, FastAPI, PyTest, Vue3, Nuxt3, JUCE

Developer Tools: Git, RStudio, Linux, Vercel, GCP

Libraries: BeautifulSoup, Pandas, Matplotlib/Seaborn, Numpy/Scipy, SQLAlchemy, Bootstrap, Tidyverse, Fable, Cplex, Gurobi, SCIP

Academic Concepts: Analysis, Linear Algebra, Probability, Optimisation and OR, Graph Theory