# SEEHANAH TANG

# **EDUCATION**

**Brown University** 

Graduating in May 2025

Sc.B. in Applied Math-Computer Science [GPA: 4.00/4.00]

Relevant Courses: Object Oriented Programming, Data Structures and Algorithms, Machine Learning, Computer Vision, Numerical Optimization, Operations Research Probabilistic Models, Software Engineering, Computer Systems

## SKILLS AND INTERESTS

Technologies: Proficient in Java, Python, Git, Excel; Experience with C, JavaScript, CSS, HTML, Julia, Spark, Databricks, MATLAB, SQL, R, React

Languages: Native proficiency in English, Chinese; Elementary proficiency in Spanish, ASL

#### PROJECTS AND PUBLICATIONS

Database in C May 2023

- · Engineered a server that managed a binary search tree, where multiple concurrent users can search, add, and remove entries
- · Devised the database to handle client commands over Internet sockets in a thread-safe manner, using fine-grained mutex locking

# Brown University Building Recognition System

Dec 2022

- · Curated a comprehensive dataset by compiling records from Brown University and Rhode Island historical societies
- · Developed an advanced text recognition system in Python utilizing OCR technology to accurately identify buildings on Brown University's campus, providing valuable visual insights and historical context prior to demolition

# Publication: Using AI to predict recurrence prediction of gastrointestinal stromal tumour

Jun 2022

- · Built an optimal classification tree (OCT) to predict the probability of recurrence of GIST within 5 years after surgery
- · Dimitris Bertsimas et al. "An interpretable AI model for recurrence prediction after surgery in gastrointestinal stromal tumour: an observational cohort study". In: eClinicalMedicine 64 (2023), p. 102200. ISSN: 2589-5370. DOI: https://doi.org/10.1016/j.eclinm.2023.102200. URL: https://www.sciencedirect.com/science/article/pii/S2589537023003772.

#### EXPERIENCE

## Benefits Science, MultiPlan

Jun 2023 - Present

Data Science Intern

Boston, MA

- · Utilized Databricks and Spark to efficiently process and analyze medical claims data related to hypertension and chronic kidney disease (CKD), implementing data queuing and filtering techniques
- $\cdot$  Developed classification models to assess cost-related risk scores for individuals with hypertension and CKD
- · Crafted an accessible and user-friendly interface for predictive models on the company's dashboard using React framework Next.js

# MIT Sloan School of Management

Jul 2020 - Present

Research Assistant for Prof. Dimitris Bertsimas

Cambridge, MA

- · Orchestrated the development of machine learning models in Julia and Python, foreseeing tumor and cancer recurrence and prescribing optimal treatment strategies for specific cases (e.g., IPMN, GIST, CRLM, soft tissue sarcoma)
- · Spearheaded technical design of project, reviewing team members' code to ensure adherence to good software engineering practices

# Brown University, Department of Applied Mathematics

Jan 2022 - Present

Teaching Assistant for Partial Differential Equations, Statistical Inference, and Object-Oriented Programming Providence, RI

- · Conducted informative weekly office hours, providing support to students in comprehending math projects and course materials
- · Evaluated student performance and graded homework and exams, while also working on course website

## LEADERSHIP AND COMMUNITY ENGAGEMENT

# The Association of Women in Mathematics (AWM)

Sep 2021 - Present

Secretary

Providence, RI

- · Efficiently managed administrative tasks, including note-taking during E-Board meetings and drafting emails and announcements
- · Led successful initiatives, organizing engaging panels, community events, and mentorship programs, attracting up to 100 participants and fostered the community of women in mathematics at Brown University