

JIN XING LIM

Ph.D. Candidate @ Singapore University of Technology and Design (SUTD)

@ jinxing_1990@hotmail.com

jinxinglim.github.io

@OxJinXingLim

jin-xing-lim-840814189

jinxinglim

EDUCATION

Ph.D. in Engineering Systems and Design

Singapore University of Technology and Design

Sept 2018 – Aug 2022 (expected)

Advisors: Georgios Piliouras and Shaowei Lin

Thesis: A Blockchain-based Mechanism Design for Theorem Proving

B.Sc. in Mathematics

National University of Singapore

Aug 2010 – June 2014

Class: Second Class Honours (Upper) / Honours (Distinction)

Advisor: Yang Yue

Honours' Year Project: "Decidability of the First Order Theory of Boolean Algebra" by Tarski, A.

EXPERIENCE

Data Science Intern

Entend.ai

July 2019 – Sept 2019

Translate mathematical models for machine reasoning into software and to build applications based on the software

Lecturer

Temasek Polytechnic

July 2014 – Aug 2018

Subject leader and lecturer for the following courses: Mathematics for Applied Science - Statistics for Applied Science - Biostatistics - Scripting for Bioinformatics

PROJECT WORKS

Formalization of Divide-and-Conquer in Coq

Jin Xing Lim and Shaowei Lin

2021

Github

Game Theoretical Approaches in Multi-Agent Reinforcement Learning Policy Space Response Oracles

Jin Xing Lim and Sai Ganesh Nagarajan

2019

Github

Exploring Efficacy of Embeddings on Relation Network for Natural Language Question Answering Task

Jin Xing Lim, Zhangsheng Lai and Aik Beng Ng

2018

Github

PUBLICATIONS

Conference

- Lim, J. X., Monnot, B., Lin, S., & Piliouras, G. (2021). A Blockchain-Based Approach for Collaborative Formalization of Mathematics and Programs. In *2021 IEEE International Conference on Blockchain (Blockchain-2021)*, Virtual, Australia.
- Lim, J. X., Monnot, B., Piliouras, G., & Lin, S. (2021). (Auto)Complete this Proof: Decentralized Proof Generation via Smart Contracts. In *Online proceedings of the 6th Conference on Artificial Intelligence and Theorem Proving (AITP 2021)* (pp. 74–76). Aussois, France.

Journal Articles

- Lim, J. X., Li, B. T., & Ling, M. H. T. (2019). Sequence composition. In S. Ranganathan, M. Gribskov, K. Nakai, & C. Schönbach (Eds.), *Encyclopedia of bioinformatics and computational biology - volume 3* (pp. 323–326). Elsevier.
- Lim, J. X., & Ling, M. H. T. (2019). Gene ontology and kegg orthology mappings for 10 strains of pseudomonas stutzeri. In *Ec proteomics and bioinformatics - volume 3.1* (pp. 12–18). ECronicon.

Books

- Tan, H. M., Li, B., Lai, Z., Lim, J. X., & Chew, S. (2016). *Mathematics for applied science*. McGraw Hill Education.
- Tan, H. M., Li, B., Lai, Z., Lim, J. X., & Chew, S. (2015). *Statistics for applied science*. McGraw Hill Education.

HONOURS & AWARDS

Global Young Scientist Summit 2020

Singapore University of Design and Technology Ph.D. Fellowship (2018 - 2022)

PROGRAMMING SKILLS

Python, Coq



R, Erlang, Julia, Solidity



COURSES ATTENDED

Secureum Bootcamp Epoch 0

Rajeev Gopalakrishna

 Dec 2021

 Secureum

Ethereum Blockchain Developer Bootcamp With Solidity (2021)

Ravinder Deol, Thomas Wiesner and Martin Sterlicchi

 Nov 2021

 Udemy

Structural Equation Modelling Workshop Using Stata

Chan Yiong Huak

 Dec 2017

 National University Health System (NUHS)

R Bioconductor Training for Bioinformatics

Alfred Ang

 Dec 2016

 Tertiary Infotech Pte Ltd

Biostatistics for Research (Advanced) Workshop

Chan Yiong Huak

 Dec 2016

 Singapore General Hospital Postgraduate Allied Health Institute

Biostatistics for Research (Basic/Intermediate) Workshop

Chan Yiong Huak

📅 Oct 2016

📍 Singapore General Hospital Postgraduate Allied Health Institute

Data Analytics in Healthcare Course

K C Lun

📅 Nov 2014

📍 Gateway Consulting Singapore

AREAS OF INTEREST

Blockchain: Blockchain applications - Formal verification of blockchain

Theorem Prover: Formalization and verification of mathematics, programs and protocols - Automated reasoning tools on proof assistants

Others: Mathematical logic - Type theory - Category theory - Program synthesis - Explainable AI

REFEREES

Assoc. Prof. Georgios Piliouras

@ Singapore University of Technology and Design

✉ georgios.piliouras@gmail.com

Dr. Shaowei Lin

@ -

✉ shaoweilin.research@gmail.com

Prof. Yang Yue

@ National University of Singapore

✉ matyangy@nus.edu.sg