**ZHANG Simian**Mobile: (+65) 84560290| Email: [zhang.simian@u.nus.edu](mailto:zhang.simian@u.nus.edu)| GitHub: <https://simoncodezzz.github.io>

**EDUCATION**

**National University of Singapore Aug 2023 – Present**

* PhD Student in Department of Information Systems and Analytics, School of Computing
* Research Interests: Analytical Modelling and Mechanism Design for Online Platforms

**National University of Singapore Aug 2019 – May 2023**

* BSc (Hons) in Data Science and Analytics, Highest Distinction
* Second Major in Economics, Minor in Computer Science
* Awards: Dean’s List in AY2021/22 and AY2022/23, Undergraduate Science & Technology Scholarship

**WORK & RESEARCH EXPERIENCES**

**Teaching Assistant, NUS Department of Information Systems and Analytics (DISA), Singapore July 2023 – Present**

*Academic department with extensive research in the fields of information systems and data analytics.*

* BT1101 Introduction to Business Analytics, Semester 1, AY2023/24

**Teaching Assistant, NUS Department of Statistics and Data Science (DSDS), Singapore July 2022 – May 2023**

*Academic department with the goals to advance statistical and data science.*

* DSA2101 Essential Data Analytics Tools: Data Visualisation, Semester 1, AY2022/23
* DSA2101 Essential Data Analytics Tools: Data Visualisation, Semester 2, AY2022/23

**Student Research Assistant, NUS Institute of Operations Research (IORA), Singapore Jan 2022 – June 2023**

*Academic institute with research focuses on the optimization, analysis and management of service systems.*

* Supervised by Prof Jussi Keppo from NUS Business School
* Conducted Bayesian structural estimation for comparative statics, processed data from multiple sources in Python and R, and assisted in model diagnostics in multiple projects including contest design and pilot training
* Performed model robustness checking with extensive simulations for herd detection in financial forecasts using large-scale Bayesian structural estimation methods

**Data Engineer Intern, ByteDance, Singapore May 2021 – July 2021**

*Chinese multinational internet technology company with products including Tik Tok and Douyin.*

* Constructed stable data pipelines using Hive, Spark, Kafka to account for costs and revenues of video services such as storage, transcoding, playing and content delivery network (CDN)
* Collaborated with product managers and engineers to optimize existing data pipelines and provide accurate and timely dashboard reporting
* Built forecasting model in Python to predict usage of bandwidth by video services with mean absolute error less than 3% (improved from > 10%) to help budget planning

**Data Analytics Intern, International SOS, Singapore Dec 2020 – Jan 2021**

*World's leading health and security risk services company.*

* Assisted data scientists and data analysts with timely data cleaning, modelling and reporting
* Wrote R scripts to automate data quality checking of more than 1,000,000 entries in data migration project
* Analyzed medical data, applied clustering model with feature engineering to provide operational insights

**LEADERSHIP**

**President, NUS 90 Degree Chinese Drama ClubApr 2020 – Apr 2021**

* Led a team of 30 to come out 2 drama productions in Singapore Drama Center that was featured in local media Lianhe Zaobao (联合早报)
* Produced and co-directed a school-themed drama series of 6 episodes
* Administered drama training sessions, recruitments and marketing with an achievement of 100 audiences and $5000 sponsorship

**EXCO, NUS Active Community Engagement Migrant CommitteeSep 2019 – Apr 2020**

* Collaborated with a team of 5 focusing on Singapore migrant workers’ rights, equality and well-beings, engaged to bring close them with students to eliminate misunderstandings
* Planned and executed engagement sessions for NUS students in College of Alice & Peter Tan and foreign domestic workers in Centre for Domestic Employees
* Over 20 foreign domestic workers attended sessions with feedback of appreciation

**ADDITIONAL INFORMATION**

* Programming Tools: Python, R, MATLAB, SQL, Java, Tableau, STATA
* Languages: English(fluent), Chinese(native), Japanese(elementary)