

# RICHMOND SIN JING XUAN

+65 91991394 • richmondsin.rs@gmail.com • www.linkedin.com/in/richmondsin

## EDUCATION

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**National University of Singapore**  
**Bachelor of Science (Hons)**

Aug 2021 - Dec 2024

- Major in Data Science & Analytics (Specialisation in Operations Research)

## SKILLS

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- Programming Language: ReactJS, NodeJS, NextJS, Java, HTML, CSS, TypeScript, Tailwind CSS, Scikit-learn, OpenCV, PyTorch, TensorFlow, SQL, Python, R, PostgreSQL, MySQL, Db2
- Data Analysis Techniques: Multiple Regression, Logistic Regression and Data Visualization
- Data Science Techniques: Machine Learning Algorithms, Classification & Regression Models, Deep Learning and Foundational Model
- Software: IBM Watsonx, IBM Watson Discovery, IBM Watson Assistant

## EXPERIENCE

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**National University of Singapore (NUS), Teaching Assistant**

Aug 2023 - Present

- CS2040: Data Structure and Algorithms, it covers data structures (linked lists, stacks, queues, hash tables, binary heaps, trees, and graphs), searching and sorting algorithms, and analysis of algorithms

**IBM, Data Science Intern**

Aug 2023 - Present

- Conducted exploratory data analysis and revised machine learning algorithms using industry-leading tools (e.g., Python and R) on a cloud platform (e.g., IBM Cloud), resulting in actionable insights and enhanced business outcomes for external clients
- Collaborated with a cross-functional team of Data Scientists, Architects, and Software Engineers to construct and deploy machine learning solutions, solving complex enterprise-scale problems
- Utilized watsonx's AI foundation model creation capabilities to build and deploy foundational Natural Language Processing (NLP) models, enabling real-world applications and empowering businesses with actionable insights from textual data

**Skin Research Institute of Singapore (SRIS), Data Science Intern**

May 2023 - Present

- Proficient in using Python for data analysis, including data cleaning and manipulation with libraries such as NumPy and Pandas
- Performed data visualizations using the Matplotlib and Seaborn libraries in Python
- Analyzed wound data using statistical analysis techniques such as regression analysis and hypothesis testing to draw insights

**Agency for Science, Technology and Research (A\*STAR), Machine Learning Intern**

May 2023 - Present

- Contributed to the Wound Healing Prediction with Machine Learning project as part of a joint attachment with A\*STAR and SRIS

- Developed predictive models using machine learning algorithms such as kNN, logistic regression, Naive Bayes, Random Forest, XGboost, Gradient Boosting, and LightGBM
- Utilized Python libraries including scikit-learn, Keras, and TensorFlow for model development and training

**Economics Development Board Investment (EDBI), Data Analyst and Corporate Planning Intern**

Nov 2022 - Feb 2023

- Developed and maintained KPI reports to track progress against specific EDBI goals
- Conducted trend analysis to identify potential areas of growth for EDBI and provided insights and recommendations to senior management based on data analysis
- Researched and analysed data to implement data-driven solutions to support corporate planning initiatives with data visualisation

**NUS AI In Healthcare Datathon, Contestant**

Dec 2022 - Dec 2022

- Created statistical analysis using R and Python to find the optimal temperature range for ICU patients
- Analysed using the Generalized Additive Model (GAM) to pinpoint optimal range
- Created a predictive model to forecast inpatient length of stay using machine learning techniques

**LEADERSHIP EXPERIENCE**

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**42nd Science Club Management Committee, President**

Sep 2021 - Sep 2022

- Planned and led a total of 54 faculty-wide events with 183 subcommittee members to enhance student life in NUS Faculty of Science
- Represented Science students in the NUS Student Union meeting with all faculty Presidents in NUS to enact NUS-wide initiatives such as implementing P-Card for large transactions to improve constituent club financial processes
- Planned and organized club meetings and discussions to improve student life in Faculty of Science

**34th Anderson Junior College Students' Council, President**

May 2017 - Sep 2018

- Initiated planning of over 20 school events together with 27 council members to serve 1,200 students in Anderson JC
- Spearheaded various functions representing AJC such as inter-school council meeting and presidential forums for leadership
- Planned the merged orientation with Serangoon JC for 1,000 incoming J1s for the new Anderson Serangoon JC

**AWARDS AND SCHOLARSHIP**

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- The 23rd NUS School of Computing Term Project Showcase (STePS) (Gold Award), 2023
- NUS Community Impact (Mid-Term) Scholarship, 2023
- NUS Student Life Award for Leadership Excellence (Distinction), 2022
- National Young Leaders Award (Merit), 2019
- Anderson Junior College's Valedictorian, 2018