

Zheyuan (Ryan) Lai

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EDUCATION

National University of Singapore (NUS) | Singapore Aug 2023 - Present

BACHELOR OF SCIENCE (HONOURS) IN **Statistics** | **GPA:** 4.89/5.00

Specialize in Data Science | Minor in Computer Science

Selected Coursework (incl. ongoing courses): Multivariable Calculus (A), Linear Algebra (A+), Programming Methodology (A+), Discrete Math (A), Probability (A), Statistical Computing (A), Regression Analysis, Stochastic Process, Data Structures and Algorithms, Numerical Computation (Scientific Computing)

Stanford University | Stanford, CA Jun 2024 - Aug 2024

INTERNATIONAL HONORS PROGRAM | **GPA:** 4.075/4.0

Coursework: EE364A Convex Optimization I (Graduate Level, A-), STATS200 Introduction to Statistical Inference (A+), ME344S HPC-AI Summer Seminar Series (A+)

SKILLS

Languages: Python, R, \LaTeX , Markdown

Packages: NumPy, SciPy, Matplotlib, Pandas, PyTorch, TensorFlow, scikit-learn, Keras

Tools: Git/GitHub, Unix Shell, VS Code, PyCharm

EXPERIENCE

Research Intern @ Bioinformatics Institute, A*STAR Aug 2024 - Present

Computational Digital Pathology Lab (CDPL), supervised by Dr. Weimiao Yu

- **Project:** Optimization and Generalization of AI Digital Pathology Diagnostic Model Performance
- Investigate the impact of image appearance variations on AI diagnostic models.

PROJECTS

Breast Cancer Detection | *Python, TensorFlow, Keras, Supervised Machine Learning* Feb 2024 - Apr 2024

- Final project of *Artificial Intelligence: Technology and Impact*
- Led a team of four to conduct classification on breast cancer dataset, which consists of information of 350 different DNA fragments and corresponding labels
- Implemented classification models including Logistic Regression, Support Vector Machine (SVM), Decision Tree, Random Forest, and Artificial Neural Networks (ANN) using TensorFlow-based machine learning libraries including scikit-learn and Keras

House Price Prediction | *R, Linear Regression, Hypothesis Testing, Descriptive Data Analysis* Nov 2023 - Dec 2023

- Final project of Introduction to Statistics and Statistical Computing
- Fitted a linear regression model using RStudio to predict the house price of Oregon, USA from various factors
- Explored the effectiveness of each regressor in the given dataset and purposed the optimal combination of regressors for regression model utilizing statistical plots and t-test

CERTIFICATES

TikTok Tech Immersion Program | *TikTok*

Operations Research I, II, III | *Coursera & National Taiwan University*

Introduction to Machine Learning | *Coursera & Duke University*

Financial Markets (with Honors) | *Coursera & Yale University*

AWARDS

Top Students in Programming Methodology | *National University of Singapore*

Dec 2023