

Pang, Ka Chun (Ricky)

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EDUCATION

Hong Kong University of Science & Technology (HKUST)	Hong Kong
M.Phil in Physics	June 2023

B.Sc in Physics, Physics and Maths Track, Upper-Second-Class Honors	June 2020
Relevant Coursework: Computational Physics, Statistical Physics, PDE/ODE	
Activity: STEM Tutor of Center for Global & Community Engagement, HKUST	

Conseil Européen pour la Recherche Nucléaire (CERN)	Geneva, Switzerland
Summer Researcher, selected out of over 4200 worldwide applicants	June 2020

EXPERIENCE

Department of Physics, HKUST	Sept. 2022 - May 2023
Graduate Research Assistant	

- Analyzed 10,000+ clients' data and developed a classification model to predict churn rate that prevented client loss with 90% accuracy using Artificial Neural Network
- Predicted stock prices using LSTM Recurrent Neural Network by analyzing 5+ years of stock prices data set, providing strategic insights for quantitative finance
- Collaborated in an international research group of 10 worldwide researchers, including Mainland China, Hong Kong, and the USA

Department of Physics, HKUST	Sept. 2020 - Sept. 2022
Graduate Researcher & Teaching Assistant	

- The First team to achieve compression in specific quantum systems with a cutting-edge algorithm - Zipper Entanglement Renormalization, enabling researchers to build efficient algorithms for computing actual quantum materials
- Optimized statistical models by incorporating different distributions, resulting in a 30% improvement in model accuracy with log-normal distribution, providing more accurate predictions and better decision-making
- Reduced the complexity in large-scale computations with an advanced Tensor Network method in Python, shortening the computational time and increasing the efficiency in the algorithm
- Instructed two-semester upper-division electronic lab and achieved a teaching rating of over 90%

SKILLS & CERTIFICATIONS

Programming	Experienced in Python, C, C++, JavaScript, TypeScript, Bash
Data Science	Pandas, Scipy, XGBoost, SQL, TensorFlow, Keras, Scikit-Learn, PySpark
Web Dev	ReactJS, Django, Material UI, HTML, CSS, Bootstrap
Certificates	Machine Learning & SQL Kaggle Certifications Python Basic & SQL Basic HackerRank Certifications