Shannon How

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EDUCATION

UNIVERSITY OF SOUTHAMPTON   United Kingdom
PhD in Machine Intelligence for Nano-Electronic Devices and Systems   Sept 2021 - present

NATIONAL UNIVERSITY OF SINGAPORE   Singapore
B.Sc (Hons) in Data Science and Analytics   Aug 2016 - Jun 2020

DELFT UNIVERSITY OF TECHNOLOGY   the Netherlands
Student Exchange Program (SEP) at Faculty of Electrical Engineering, Mathematics and Computer Science   Feb 2019 - Jul 2019

WORK EXPERIENCE

GOLDMAN SACHS   London
Summer Associate, Fixed Income Macro Strats   Jun 2025-Aug 2025
• Implemented methodologies to approximate and enrich historical fixed-income datasets, improving the quality of inputs that support more informed portfolio allocation decisions
• Analyzed model interpretability and applied machine learning techniques for volatility forecasting, achieving competitive predictive performance with fewer variables than state-of-the-art approaches

DELOITTE   Singapore
Data Scientist, Risk Advisory   Oct 2020 - Sep 2021
• Conducted research and analysis on data-driven solutions for financial crime and fraud detection
• Designed and developed interactive dashboards for monitoring trade breaks, delivering strategic insights for a Singapore-based FinTech firm
• Applied advanced machine learning methodologies to identify and analyze malicious network traffic data for a leading Indonesian telecommunications company

ROLLS-ROYCE   Singapore
Intern, Future Intelligence Technologies   Jan 2020 - May 2020
• Contributed to the submission of a paper for *Knowledge-Based Systems* by designing, conducting experiments and analyzing the results to compare feature selection and gradient boosting methods
• Investigated and evaluated existing explainable Artificial Intelligence (AI) methods for potential engineering purposes
• Developed a method to integrate trust scores with Individual Conditional Expectation (ICE) plots to assess confidence and trust in machine learning model predictions for specific instances

SKILLS

• **Programming Languages:** Python, R, SAS, SPSS, MATLAB, Java, SQL, Tableau
• **Languages:** English (Proficient), Chinese (Proficient), French (Basic)

CO-CURRICULAR ACTIVITIES

NUS BOXING   Singapore
Chairperson   Aug 2018 - Jun 2020
• Directed a team of committee members to manage the operation of the club and training sessions
• Successfully spearheaded and assisted in the planning and execution of events such as Student Life Fair and Exhibition Fight
• Initiated a volunteer outreach program with Glpyh Asia to expose children of lower income families to Boxing

VOLUNTEER EXPERIENCE

• TOUCH Young Arrows   Aug 2017 - Sep 2021
• NUS Overseas Community Involvement Programme in Chiang Mai, Thailand   Mar 2018 - Jul 2018
• Youth Corps Singapore   May 2017 - Jul 2017

ADDITIONAL INFORMATION

• Awarded Best Student Paper at the International Symposium on the Tsetlin Machine (ISTM), 2023
• Awarded the ECS Scholarship for PhD at the MINDS CDT from 2021-2025
• Awarded Edusave Scholarships and Good Progress from 2010 - 2014
• Awarded a Bronze Medal in the Singapore Mathematical Olympiad 2010
• Enjoys reading, running, swimming, bouldering and team sports - represented the Faculty of Science in soccer and captained the female swimming team in the annual NUS Inter-Faculty Games