

# Shannon How

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## EDUCATION

### UNIVERSITY OF SOUTHAMPTON

*PhD* in Machine Intelligence for Nano-Electronic Devices and Systems

United Kingdom  
Sept 2021 - present

### NATIONAL UNIVERSITY OF SINGAPORE

*B.Sc (Hons)* in Data Science and Analytics

Singapore  
Aug 2016 - Jun 2020

### DELFT UNIVERSITY OF TECHNOLOGY

*Student Exchange Program (SEP)* at Faculty of Electrical Engineering, Mathematics and Computer Science

the Netherlands  
Feb 2019 - Jul 2019

## WORK EXPERIENCE

### GOLDMAN SACHS

*Summer Associate, Fixed Income Macro Strats*

London  
Jun 2025-Aug 2025

- Implemented methodologies to approximate and enrich historical data, 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

*Data Scientist, Risk Advisory*

Singapore  
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

*Intern, Future Intelligence Technologies*

Singapore  
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

*Chairperson*

Singapore  
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 Glyph Asia to expose children of lower income families to Boxing

## VOLUNTEER EXPERIENCE

- TOUCH Young Arrows
- NUS Overseas Community Involvement Programme in Chiang Mai, Thailand
- Youth Corps Singapore

Aug 2017 - Sep 2021  
Mar 2018 - Jul 2018  
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