

# 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

### DELOITTE

*Data Scientist*

Singapore  
Oct 2020 - Sep 2021

- Researched, surveyed and presented data-centric methods and solutions for financial crime and fraud detection
- Developed interactive dashboards tailored for trade breaks and leveraged insights to formulate strategic recommendations for a Singapore-based FinTech firm.
- Employed advanced machine learning methodologies to identify and analyze malicious network traffic data for a leading Indonesian telecommunications company

### ROLLS-ROYCE SINGAPORE PTE LTD

*Future Intelligence Technologies Intern*

Singapore  
Jan 2020 - May 2020

- Contributed to the submission of a paper for Elsevier Knowledge-Based Systems by designing, conducting experiments and analyzing the results to compare feature selection and gradient boosting methods
- Researched existing explainable Artificial Intelligence (AI) methods that can be implemented for engineering purposes
- Developed a method to integrate trust scores with Individual Conditional Expectation plots for machine learning models to determine the confidence and trust of predictions for specific instances

### DAVINCI INNOVATION LABS

*Programming Instructor*

Singapore  
May 2018 - Jul 2018

- Taught primary school children programming skills in Python with robots

## SKILLS

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

## CO-CURRICULAR ACTIVITIES

### NUS BOXING

*Chairperson*

Singapore  
Aug 2018 - Jun 2020

- Efficiently lead a group 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 Gplyh Asia to expose children from lower income families to Boxing

### STUDENT COUNCIL

*Secretary*

Singapore  
Mar 2011 - May 2013

- Successfully planned events such as Fundraising, Teachers' day concerts and camps
- Administered council meetings and supported the rest of the committee members in their duties

## 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 a Bronze Medal in the Singapore Mathematical Olympiad 2010
- Awarded Edusave Scholarships and Good Progress from 2010 - 2014
- Awarded the Half-Colours for NUS Boxing in 2020
- Awarded the Best Student Paper at the International Symposium on the Tsetlin Machine in 2023
- 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