

Shannon How

• +44(0)7787871025 • shannonhsq@gmail.com • <https://shannonhsq.github.io>

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

- 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

Future Intelligence Technologies Intern

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

DAVINCI INNOVATION LABS

Programming Instructor

Singapore
May 2018 - Jul 2018

- Taught primary school children programming skills in Python with robots

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 Gplyh Asia to expose children of lower income families to Boxing

STUDENT COUNCIL

Secretary

Singapore
Mar 2011 - May 2013

- Coordinated events such as Fundraising, Teachers' day concerts and camps
- Effectively managed council meetings and provided administrative support to committee members

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, 2023
- First-author publication at International Conference on Learning Representations (ICLR), 2025
- Awarded the Half-Colours for NUS Boxing in 2020
- 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