

EDUCATION

University of Oxford (*Master of Mathematics in Mathematics and Statistics*), Oxford, UK Oct 2022 - Jun 2026

- *Women in CS Scholarship* from *Bending Spoons*, for merit; 1% (20/1600) under&postgrad in Europe, sole in UK
- *Catherine Hughes Grant* from *Somerville College*, to fund initiatives for intellectual curiosity and social conscience
- *Inaugural AI UK Scholar* at *Oxford Womxn in Computer Science*, for leadership and service; Sole undergraduate
- Selected Coursework: Deep learning, Statistical inference & analysis, Algorithms & data structures, Game theory, Collective decision making, AI ethics, Data ethics, Practical ethics, Feminist theory, Political & legal philosophy

BASIS International Schools (*High School Diploma with High Honors*), Huizhou, China Sep 2018 - Jun 2022

- *Inaugural Global Excellence Student Scholar*: full-ride merit scholarship with living stipend, c. USD 150k
- SAT 1600/1600; USAMO Qualifier; USACO Gold Division; Completed 16 AP, 6 capstone, and 4 honors courses

RELEVANT EXPERIENCE

Fellowship, *Oxford SDG Impact Lab* (Oxford, UK) Dec 2024 - Present

- Advance the UN SDGs via hands-on, interdisciplinary, impact-driven projects; First-ever undergraduate selected

Trading and Risk Management Academy, *Qube Research & Technologies* (Oxford, UK) Nov 2024 - Present

- Completed four-week intensive course on data, models, risk, portfolios; Design and manage trading algo in teams

Quantitative Research Internship, *Chengqi Asset Management* (Shenzhen, China) Sep 2024

- Developed an alpha with Sharpe ratio 2.33 using statistical data analysis and ML feature selection algorithms
- Expanded 4-feature dataset via transformations and Shapley analysis; Retained top features and generated alphas
- Customised and optimised 10+ configuration scripts (.xml) to streamline and automate alpha implementation

Student Research (College-Funded), *Dept of Computer Science, Uni of Oxford* (Oxford, UK) Jul 2024 - Aug 2024

- Modelled voting power dynamics using the Shapley–Shubik power index in weighted voting systems
- Analysed decision-making under uncertainty by evaluating coalition probabilities and pivotal voter influence
- Investigated fairness and efficiency in voting rule design, optimising system robustness and equity

AI Development Micro-Internship, *Legal-Pythia* (Remote) Dec 2023

- Tested and implemented large language models with explainable AI to parse and analyse legal databases

T-Spark Challenge: AI+ Human Hand Liveness Detection, *Tencent* (Shenzhen, China) Jul 2022 - Aug 2022

- Developed anti-spoofing methods for Palm Payment with gesture recognition, multi-touch analysis, and 3D vision
- Optimised focus detection using Laplacian Transform to counter screen attacks with reflections and moiré patterns
- Designed, built, and optimised the user interface, simplifying detection gestures based on user feedback

T-Spark Challenge: Short-Form Video Recommendation, *Tencent* (Shenzhen, China) Jul 2021 - Aug 2021

- Optimised recommendation algorithms with neural networks, enhancing engagement through feature engineering
- Analysed 100k user behaviour records (e.g., click-through rates, swipes) to refine features and enhance targeting
- Implemented ML architectures (Wide & Deep, GBDT, FCNN); Tuned hyperparameters; Surpassed benchmark

T-Spark Future Academy, *Tencent* (Shenzhen, China) Jun 2020 - Oct 2020

- Placed 4th / 1300+; Received Tencent YouTu AI Research Lab internship offer (computer vision, flexible start)
- Developed a dietary app; Built/optimised a food recognition AI after preprocessing/augmenting a public dataset

Spring into Tech, *J.P. Morgan* **Discover**, *Citadel* | *Citadel Securities* **Insight: Trading**, *Jane Street*

SELECTED VOLUNTEERING

Demonstrator, *GirlsWhoML* Dec 2024 - Present

Undergraduate Representative, *EDI Committee, Department of Statistics, Uni of Oxford* Oct 2024 - Present

- Proposed strategies to reduce attainment gaps; Reviewed LGBT+ History Month logo designs for compliance

Undergraduate Representative, *Oxford Womxn in Computer Science, Uni of Oxford* May 2024 - Present

- Co-launched inaugural mentorship programme; Organised undergrad dinner for 35; Host fortnightly Sip & Solve

President 24-25 (Publicity/IT 23-24), *Maths Undergrad Rep Cmte, Maths Inst, Uni of Oxford* Nov 2023 - Present

- Boosted survey participation by 50%; Reduced scheduling conflicts; Advocated for equitable course access
- Revamped website and options fair; Secured annotated project examples; Piloted fairer grading algorithms

JCR IT and Communications Officer, *Somerville College, Uni of Oxford* Jun 2023 - Nov 2024

- Ran the JCR (undergraduate student body) website and social media; Posted weekly Instagram updates
- Supported democratic processes for publishing student body statements; Assisted College in crisis communications

Co-President, *Somerville Mathematical Society, Somerville College, Uni of Oxford* Aug 2023 - Jul 2024

- Co-organised monthly events for 150+ members; Ran course options Q&A; Promoted maths activities in Oxford

Lead Curriculum Developer, *Women Who Code: Data Science* Dec 2023 - Apr 2024

- Developed lesson plans/guides for inaugural mentorship program supporting 50 mentees; Gathered testimonials
- Hosted and moderated monthly interviews with industry experts

Programming Languages: Python (preferred); R, MATLAB, SQL, C++, Java, JavaScript (prior experience); \LaTeX

Natural Languages: English, Mandarin Chinese (native); Dutch, Cantonese Chinese (elementary)