

EDUCATION

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

- *Fellow* of the *SDG Impact Lab*, to advance UN SDGs via impact-driven projects; First-ever undergraduate selected
- *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 Women in Computer Science*, for leadership and service; Sole undergraduate

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; Completed 16 advanced placement (AP), 6 capstone, and 4 honors courses

RELEVANT EXPERIENCE

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, *Oxford Women 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

OLYMPIADS

Global 12th Place Among Women, *American Invitational Mathematics Examination (AIME)* **Mar 2021**

- AMC/AIME score *surpassed USAMO cutoff*, but ineligible for further IMO consideration due to non-U.S. residency

Distinguished Honor Roll / Top 1%, *American Mathematics Contest 12 (AMC 12)* **Feb 2021**

Global 7th Place, *American Regions Mathematics League (ARML)* **Oct 2020**

Gold Division Placement, *USA Computing Olympiad (USACO)* **Feb 2020**

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

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