# Education

# MSci Mathematics, University College London

Sep 2022 – Jun 2026

- Predicted classification: First Class Honours following achievement in years 1 and 2
- Notable topics: Measure Theory, Differential Forms and Manifolds, Metric and Topological Spaces, Galois' Theory

#### International Baccalaureate Diploma, Dwight School London

Sep 2020 – Jun 2022

- 43/45: 7/7 Mathematics AA HL, Physics HL, Economics HL, English A LL SL, French B SL; 6/7 Philosophy SL (self-taught); 2/3 TOK and Extended Essay
- Gifted and Talented Programme member: attended enrichment opportunities, mentored juniors

# **Projects**

#### University College London Year 2 Research Project — Analysis

May 2024 -

• Studied linear maps on normed spaces, researched so-called quasinormed spaces. Awarded, through a top-ranked presentation, participation in a UCL Main Campus poster exhibition. Poster now displayed in UCL Mathematics Dept

#### University College London Year 1 Group Research Project

May 2023 – Jun 2023

Explored some tiling puzzles through Graph Theory, presented results to peers and professors

# Extended Essay on Mathematics Pedagogy

Sep 2021 – Dec 2021

• Examined the extent to which processes of mathematics are actually held within high school pedagogy

#### Problems in elementary combinatorics

Sep 2020 – Jul 2021

Collected and developed some problems, suitable for exposition to high school students

# Work Experience

Hong Kong Applied Science and Technology Research Institute — Intern, Hong Kong

Jun 2024 – Aug 2024

• Projects in healthcare AI: used python to assist in creating synthetic training data for an object recognition model, collected and processed training data for a skeleton-based action recognition model, increasing accuracy by 10%

#### **Xperitus Insurance Brokers** — Intern, Mumbai and London

Aug 2023 – Oct 2023

• Developed an understanding of insurance and reinsurance: produced a report for the Mumbai company, identifying suitable potential partner brokers and syndicates in London

# University College London — Transition Mentor, London

Sep 2023 - Dec 2023

• Mentored 9 incoming 1<sup>st</sup> year mathematics students, providing pastoral care and academic support

# Tutor

Sep 2020 –

• Privately tutoring students in university, A-Level, IB, GCSE, and aged 10-14; volunteering time to guide differently abled or struggling students towards realising their potential

#### Kundakala C.I.C. — Trustee, London

Dec 2020 -

• Designing strategies for the delivery of skills, and employability services to ethnic minority women in the UK

#### Activities

- Languages: Python, Lean, LATEX; English; French (B2); Marathi and Hindi (conversational); Mandarin (beginner)
- Former National Swimmer: 2-time British National Finalist, Kenyan National Champion, England East Region Champion, 2-time England East Region Bronze Medallist, Hertfordshire County Champion
- Interests: guitars, cricket, Manchester United, Central Asian geography

References on request. Materials related to my research projects may be found on my website.