Alfred Wong

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Education

University of Cambridge, Trinity College — BA MEng
Part I Mathematics - Part II Engineering (1st) — 2016 - 2020

Examinations
STEP II, III: S, 1 - A Level: 3A*, 2A - GCSE: 11A*, 2A - GRE: 170, 167, 4.5 - ACT: 35

Experience

Optiver — Amsterdam
Trader — Nov 22 (incoming)

Centiva Capital — London
Quantitative Research Intern — Jun 22 - present
- Constructed the FX signals for a new section of a systematic desk, examining market intuitions and research
- Covered full spectrum of systematic trading, from data cleaning to signal generation and model optimisation

Microsoft Research — Cambridge
Research Engineer — Dec 20 - Nov 21
- Facilitated VR/AR hardware research, leveraging various technologies to accelerate prototype iteration cycles
- Drove development of OpticSim.jl, an open-source package for CSG-based optical simulation/optimisation
- Ideated various novel tesselation-based algorithms for designing multi-lens array VR/AR displays

Goldman Sachs — London
Summer Analyst — Jun - Aug 19
- Sat with Client Services and Equities Structured Products Strats within the Securities division
- Implemented a full-stack application to visualise distributed flows and worked on various Slang projects

PlayFusion — Cambridge
Intern — Jul - Sep 18
- Studied the viability of applying an ML-based AI to a newly released video game (trained from tabula rasa)
- Adapted AlphaZero's asynchronous policy-value Monte Carlo tree search algorithm for a novel use case
- Architected a scaling distributed cluster (EC2, TCP/IP) for training the policy-value network

Extra

Projects
- Machine learning: feature disentanglement and balanced representation learning for medical data
- OpticSim.jl: open-source Microsoft library for ray tracing and surface optimisation (top contributor)
- Tetris: coded in C (for Cortex-M0 driving a colour display) and OCaml

College Sports
- Trinity College Basketball Captain: led 3 sessions/week, secured promotion to Division 1 (of 5)
- 1st Men's Novice VIII: 9/9 race win record, first Fairbairn Cup victory in 33 years
- Lower Boats' Captain: student-led program teaching rowing to 100+ novices, as a team of 7

School
- Music competition: composed for and led an orchestra, choir, small groups and soloists, as a team of 3
- School Symphony Orchestra: Concertmaster for Dvorak 9, Violin 2 leader for Beethoven 5
- House Vice-Captain & Prefect: organised and participated in sports teams across all year groups
- Mathematical Olympiads: sat the BMO2 and attended an Olympiad Training Camp at Oxford
- National Junior Chess Squad: represented England at the Gibraltar International Junior Chess Festival