

Education – Institutional

Experience – Team/Social

UCL	2024–2027	UNDERGRAD TEACHING ASSISTANT	starting Oct 2025
Y1: 83.38%	BSc Computer Science		
JESS Dubai	2020–2024	UCL COMPETITIVE PROGRAMMING SOCIETY	Since Nov 2024
GCSEs, IB Diploma		Founding & committee member. Hosts lectures, workshops, and contests; team building & training for competitions.	

Education – Industry

JESS AI CLUB

Academic year 21–22

ALGORITHMS & DATA-STRUCTURES		Founder and host. Major success; attendance filled entire classroom.	
Competition code; Technical analysis			

APPLICATION PROGRAMMING		MATHEMATICAL MODELING	Nov 2022; Feb 2023
Concurrency; Relational DB; API design; Generic programming; Scalable realtime applications		Meritorious (top 23%) in HiMCM and top 25% in M3C. Led and coached team; was school’s trailblazer in math modeling.	

LANGUAGES & FRAMEWORKS		ACADEMIC RESEARCH	May–Oct 2023
Python, C++, Haskell, Lua, Java, JS; Scipy et al., ASGI, SQL, JakartaEE		Co-authored a report on water usage in the UAE. Presented to leaders of change at the Expo R&S Awards Ceremony 2024.	

NETWORK APPLICATION		WHARTON GLOBAL INVESTMENT COMPETITION	2022
LAN admin., VLAN bridging; OpenWRT; VPN; (D)DNS & SMTP		Team leader. Rank #75/5088. Best performance in school history. Inspired seven teams to register the following year.	

SYSADMIN & DEVOPS		REGIONAL MATH COMPETITION	Feb 2023
Physical and remote server mgmt.; UEK, SELinux; CI/CD workflows		DMSL senior winning team and MVP. Defeated long-reigning champion, Dubai College.	

LOWLEVEL & EEE		ENVIRONMENTAL ACTIVISM	2022-2024
ESP-IDF; RTOS; Serial; Analogue signals; Circuit design; Soldering		School- and community-wide initiatives as part of the JGI Roots & Shoots movement. Met Dr. Jane Goodall.	

DATA SCIENCE		VOLUNTARY TEACHING	Various
Computational modeling, Time-series; Visualization; Validation & Forecasting		Taught EFL to 70+ underprivileged students (summers 22-23). GCSE CS academic mentor (school-year-long).	

Experience – Individual

DEVELOPMENT TOOLS		COMPETITIVE PROGRAMMING	first 2021 then 2024
Git, CMake; LSP, DAP; MSYS2, Unix; NeoVim, JB IDEs, Terminal, SSH		Codeforces (UK 28th), Leetcode (7.61%), USACO (Gold), ICPC (Team), Google coding competitions, etc.	

TYPESETTING		gws (akioweh.com)	since 2023
LaTeX, TikZ, BibTeX		“General WebServer”. Modern web technology prototyping, incl. ASGI, h3, reverse proxying, CD, DNSSEC, DMARC	

MEDIA & DESIGN SOFTWARE		OiqBot	since 2020
Adobe CC (Pr, Ps, Ai); FFmpeg		Realtime network app under a cooperative concurrency model and a modular, hot-loadable plugin structure. ~ 67f, 3.8k loc	

TECHNICAL SOFTWARE		LOOPED SOFTWARE	since Jun 2025
Fusion 360, LTSpice, Mathematica		Full-stack P2P e-commerce systems platform.	

Misc

sheepcalc

Jul 2025

LIVE AUDIO & VIDEO		HOMELAB	2024–2025
Event audio-visual control & setup; Live broadcasting; Live audio mixing		Incl. Ethernet patching, router modding. Repurposed devices into proxy jump servers, NAS, private DNS resolver.	

BUTTON-PRESSING		AEQ	around 2024
15s: 158wpm 4.18%; 60s: 142wpm 2.15%		“Advanced EQ”. Python package to read, analyze, adjust, and generate DSP (convolution EQ) filters at high precision.	

MUSIC	Piano: ABRSM Gr. 7		
NATURAL LANGUAGES	English, Mandarin		