

Education – Institutional

Experience – Team/Social

UCL 2024–2027
Y1: 83.38% BSc Computer Science

JESS Dubai 2020–2024
GCSEs, IB Diploma

Education – Industry

ALGORITHMS & DATA-STRUCTURES
Competition code; Technical analysis

APPLICATION PROGRAMMING
Concurrency; Relational DB; API design; Generic programming; Scalable realtime applications

LANGUAGES & FRAMEWORKS
Python, C++, Haskell, Lua, Java, JS; Scipy et al., ASGI, SQL, JakartaEE

NETWORK APPLICATION
LAN admin., VLAN bridging; OpenWRT; VPN; (D)DNS & SMTP

SYSADMIN & DEVOPS
Physical and remote server mgmt.; UEK, SELinux; CI/CD workflows

LOWLEVEL & EEE
ESP-IDF; RTOS; Serial; Analogue signals; Circuit design; Soldering

DATA SCIENCE
Computational modeling, Time-series; Visualization; Validation & Forecasting

DEVELOPMENT TOOLS
Git, CMake; LSP, DAP; MSYS2, Unix; NeoVim, JB IDEs, Terminal, SSH

TYPESETTING
L^AT_EX, TikZ, BibT_EX

MEDIA & DESIGN SOFTWARE
Adobe CC (Pr, Ps, Ai); FFmpeg

TECHNICAL SOFTWARE
Fusion 360, LTSpice, Mathematica

Misc

LIVE AUDIO & VIDEO
Event audio-visual control & setup; Live broadcasting; Live audio mixing

BUTTON-PRESSING
15s: 158wpm 4.18%; 60s: 142wpm 2.15%

MUSIC
Piano: ABRSM Gr. 7

NATURAL LANGUAGES
English, Mandarin

UCL COMPETITIVE PROGRAMMING SOCIETY Since Nov 2024
Founding & committee member. Hosts lectures, workshops, and contests; team building & training for competitions.

JESS AI CLUB Academic year 21–22
Founder and host. Major success; attendance filled entire classroom.

MATHEMATICAL MODELING Nov 2022; Feb 2023
Meritorious (top 23%) in [HiMCM](#) and top 25% in [M3C](#). Led and coached team; was school’s trailblazer in math modeling.

ACADEMIC RESEARCH May–Oct 2023
Co-authored a [report](#) on water usage in the UAE. Presented to leaders of change at the [Expo R&S Awards Ceremony 2024](#).

WHARTON GLOBAL INVESTMENT COMPETITION 2022
Team leader. Rank #75/5088. Best performance in school history. Inspired seven teams to register the following year.

REGIONAL MATH COMPETITION Feb 2023
[DMSL](#) senior [winning team](#) and MVP. Defeated long-reigning champion, Dubai College.

ENVIRONMENTAL ACTIVISM 2022-2024
School- and community-wide initiatives as part of the [JGI Roots & Shoots](#) movement. Met Dr. Jane Goodall.

VOLUNTARY TEACHING Various
Taught EFL to 70+ underprivileged students (summers 22-23). GCSE CS academic mentor (school-year-long).

Experience – Individual

COMPETITIVE PROGRAMMING first 2021 then 2024
Codeforces (UK 28th), Leetcode (7.61%), USACO (Gold), ICPC (Team), Google coding competitions, etc.

[gws](#) ([akioweh.com](#)) since 2023
“General WebServer”. Modern web technology prototyping, incl. ASGI, h3, reverse proxying, CD, DNSSEC, DMARC

[OiqBot](#) since 2020
Realtime network app under a cooperative concurrency model and a modular, hot-loadable plugin structure. ~ 67f, 3.8k loc

LOOPED SOFTWARE since Jun 2025
Full-stack P2P e-commerce systems platform.

[sheepcalc](#) Jul 2025
Pure λ -calculus interpreter in Haskell.

HOMELAB 2024–2025
Incl. Ethernet patching, router modding. Repurposed devices into proxy jump servers, NAS, private DNS resolver.

[AEQ](#) around 2024
“Advanced EQ”. Python package to read, analyze, adjust, and generate DSP (convolution EQ) filters at high precision.

LIVING since 2006