

Education – Institutional

UCL	2024–2027
Y1: pending%	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

NETWORK APPLICATION
LAN administration, remote management; OpenWRT; VPN; (D)DNS & email routing

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

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

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

DEVELOPMENT TOOLS
Git, CMake; LSP, DAP; MSYS2, nix; NeoVim, JB IDEs, Terminal/Remote

TYPESETTING
L^AT_EX, TikZ, Biblatex

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

Experience – Team/Social

UCL COMPETITIVE PROGRAMMING SOCIETY Since Nov 2024
Founding member and teacher. Aims to inspire new participants and to build competitive teams.

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.

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

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

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

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

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”. Experimental playground for modern (server-side) web technologies. Currently used for filehosting, instant messaging, and email with 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.

NETWORKING & SERVERS 2024–2025
Home LAN configuration incl. patching, router flashing, and private DNS. Repurposed old devices into Debian servers.

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

LIVING since 2006