

Education

UCL 2024–2027
Y1: 83.38% BSc Computer Science

JESS Dubai 2020–2024
GCSEs, IB Diploma

Skills & Knowledge

ALGORITHMS & DATA-STRUCTURES
Competition code; Technical analysis

APPLICATION PROGRAMMING
Concurrency; RDBMS; REST API; ASGI;
Template programming; Scalable real-time applications

LANGUAGES
Python (5yr): FastAPI, SciPy, aiohttp
C++ (2yr): FreeRTOS, Boost
Java (3yr): Maven, EE, JSP & JSTL
Haskell (1yr); Lua (1yr); JavaScript (2yr)
Object-oriented, Declarative, Functional

NETWORKING
WAN Architecture, Anycast; DNS,
email security: DNSSEC, DMARC;
NAT, Subnets; LAN administration

DEVOPS & SYSADMIN
Cloud infrastructure / VPS, Terraform;
Entreprise & SE Linux; CI/CD

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

DATA SCIENCE
Computational modeling: Time-series,
Regression, Monte Carlo, Dynamics; Vi-
sualization; Validation & Forecasting

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

ARTIFICIAL INTELLIGENCE
Understanding of Self-attention, Transform-
ers, Pre-training, Optimizers

TYPESETTING
L^AT_EX, TikZ, BibT_EX

Misc

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

NATURAL LANGUAGES English, Mandarin

Experience – Team/Social

UNDERGRAD TEACHING ASSISTANT starting Oct 2025

UCL COMPETITIVE PROGRAMMING SOCIETY Since Nov 2024
Founding & committee member. Hosts lectures, workshops,
and contests; we build & train teams 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](#).

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%). ICPC, targeting
European Championships this year.

[gws](#) ([akioweh.com](#)) since 2023
“General WebServer”. A prototype for personal fileshares
and web technologies incl. HTTP/3, reverse proxying, CD

[0iqBot](#) since 2020
Realtime network app under a cooperative concurrency model
and modular, hot-loadable plugins. ~ 67f, 3.8k loc

LOOPED SOFTWARE since Jun 2025
Full-stack P2P e-commerce system platform in development.

[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.