

Belal Zaky

Dubai, UAE · London, UK | hello@belalzaky.uk

belalzaky.uk · linkedin.com/in/belalzaky · github.com/belalzaky · belalzaky.substack.com

BSc Pharmacology student at King's College London working where drug safety, data and AI meet. Self-taught in Python, R and SQL, with nine shipped projects across signal detection, causal inference and a tested, containerised pharmacovigilance pipeline.

EDUCATION

King's College London — BSc Pharmacology (Hons)

Expected Jun 2028

London, United Kingdom

Emirates International School - Jumeirah — International Baccalaureate (IB) Diploma

2024

Dubai, United Arab Emirates

PROJECTS

Causal safety — does an NSAID cause acute kidney injury?

2026

Python · propensity-score matching · self-controlled case series · bootstrap CI

- Emulated a new-user, active-comparator study and scored the estimators against a sealed true effect: the crude comparison understated the harm by 46% (OR 1.19); matching (2.05) and a self-controlled case series (2.14) recovered the truth (2.20).
- A simulation study by design — the only setting where a causal method can be checked against a known answer. Same protocol queued for real clinical data (MIMIC-IV).

PV Intake Assistant — production pharmacovigilance pipeline

2026

Python · scikit-learn · scispaCy · SNOMED CT · pytest · GitHub Actions · Docker

- Three-stage pipeline: triage an abstract for a possible adverse drug event (F1 0.38 to 0.79), extract drug and effect, then code it to SNOMED CT. Built as a system — 32 unit tests, CI on every push, a Dockerfile and a CLI.

Pharmacovigilance signal detection — FAERS (20M+ FDA reports)

2026

Python · pandas · SQL · openFDA API · PRR / ROR / chi-squared / Evans criteria

- Disproportionality signal detection over 20M+ adverse-event reports, validated on the known warfarin-haemorrhage signal (PRR ~ 5). Companion work showed a heartburn drug's report spike was litigation, not clinical harm.

EXPERIENCE

Aster Pharmacy — Sales Intern

Jul 2024

- Supported customer service and sales operations in a busy retail pharmacy environment.

Modon Designs — Project Coordinator & Business Development Associate

Jun 2022 – Apr 2023

- Coordinated client-team communication and technical documentation, built digital filing systems, and supported business development, brand positioning and social media.

M2 Supplements — Operations & Marketing Assistant

Jan 2022 – Jun 2023

- Managed order fulfilment and customer communication, ran social-media campaigns, and supported product launches working directly with the founders in a startup environment.

LEADERSHIP & ACTIVITIES

Student Representative — BSc Pharmacology, King's College London

2025 – Present

- Represent coursemates on the Staff-Student Liaison Committee; consolidated scattered module feedback into one case that reached the department and changed the module.

King's100 — Leadership & Employability Programme, King's College London

2026

- Selected for King's flagship leadership programme — employer-led teamwork and problem-solving challenges.

Toastmasters International — Member & Sergeant at Arms

2023 – Present

- Regular prepared and impromptu speaking; earned "Speech of the Meeting" for clarity and engagement.

Model United Nations — Delegate

2023

- Researched policy positions, debated and negotiated; awarded Delegate of the Conference.

SKILLS

Data & technical: Python (pandas, scikit-learn), R, SQL, machine learning, NLP; Git, pytest, GitHub Actions CI, Docker

Methods & domain: Causal inference, survival analysis, signal detection; pharmacovigilance, RWE, EHR data, SNOMED CT

Communication: Scientific & report writing, data storytelling, public speaking. English, Arabic (native)