

Kalen Josifovski

Harpenden, United Kingdom

☎ +44 7518831124 • ✉ kalenjosifovski8@gmail.com • 🌐 kalenjosifovski.github.io/
in kalen-josifovski-4053b51b3 • 🔄 KalenJosifovski

Education

University College London (UCL)

MSc Chemical Research

Graduated with merit.

London, UK

Sep. 2021 – Sep. 2022

University of Nottingham (UoN)

BSc Medicinal and Biological Chemistry

First-Class Honours (1:1).

Nottingham, UK

Sep. 2017 – May. 2020

Experience

S2DS Bootcamp/Deutsche Welle

Data Scientist

Remote, UK

Mar. 2025 – Apr. 2025

- Participated in a five-week intensive data science bootcamp tailored for individuals with advanced scientific backgrounds.
- Worked with Deutsche Welle on a project using Large Language Models (LLMs) for generating synthetic survey responses.
- Developed a python codebase to generate and analyze synthetic survey data.
- Evaluated LLM responses against real-world survey data to assess accuracy and biases.
- Applied NLP, machine learning, and data analysis to improve response quality.
- Leverage techniques such as optimized prompting, few-shot learning, and response filtering to refine model outputs.
- Collaborated in an Agile team, gaining experience in stakeholder communication and project management.
- Explored AI's role in market research and audience analysis.

Travel

Career Break

Asia

Jan. 2024 – Jan. 2025

- Traveled extensively throughout Asia, experiencing a variety of cultures.
- Attained advanced SSI diving certification, demonstrating personal development and success.
- Completed Harvard's Python for Research course, strengthening skills in scientific computing and data analysis.
- Self-taught in cheminformatics, applying Python to molecular data analysis, QSAR modeling, and drug discovery.

Charnwood Molecular

Associate Research Chemist

Loughborough, UK

Nov. 2022 – Dec. 2023

- Designed novel small molecule compounds for various therapeutic areas, achieving improved potency and selectivity.
- Utilised molecular modelling tools to identify structure-activity trends, leading to lead compound identification.
- Designed and optimised synthetic routes, maximising yield and purity.
- Employed analytical techniques to ensure compound purity and characterisation.
- Collaborated cross-functionally with biologists and pharmacologists, interpreting assay results for efficient optimisation.
- Presented research progress to clients in weekly project meetings.
- Implemented new SOPs as a microwave super-user, enhancing safety and equipment utilisation.
- Spearheaded synthesis strategy for the 11th RSC retro-synthesis competition.

UCL School of Chemistry

Graduate Researcher – Anderson Group

London, UK

Sep. 2021 – Sep. 2022

- Conducted independent investigations, screening reaction conditions and performing meticulous control experiments.
- Reviewed literature to develop synthetic methodology and understand reaction mechanisms.
- Maintained laboratory equipment and adhered to safety protocols.
- Collaborated with colleagues on diverse research projects, gaining exposure to experimental techniques.

PRA world Ltd.

Research Technician

Melton Mowbray, UK

Sep. 2020 – May. 2021

- Developed processes for carbon black extraction and purification from end-of-life tyres, improving yield and purity.
- Functionalised carbon black nanoparticles, enhancing compatibility as additives in paints and plastics.
- Conducted formulation testing and particle size measurements to ensure optimal physical characteristics.
- Collaborated with partner companies to achieve project milestones.
- Conducted extensive patent literature searches to ensure process novelty.

Skills, Certifications & Interests

Technical Skills:

- Programming languages: Python (intermediate), SQL (basic), zsh (basic), jekyll (basic).
- Programming libraries: NumPy, pandas, pytorch, scikit-learn, scipy, matplotlib, seaborn, plotly, RDKit, OpenMM, biopython, pymol, chembl-webresource-client, OpeneyeTK.
- Data science skills: Machine learning, deep learning, neural networks and data visualisation.
- Cheminformatics skills: Library searching, docking, database querying, physical property prediction.
- Advanced laboratory skills: Organic synthesis, purification techniques, analytical methods (HPLC-MS, 1D/2D NMR).
- Med-chem skills: Drug design pipelines and structure-activity relationship (SAR).
- Software skills: ChemDraw, Mestrenova, Masslynx, Topspin, Microsoft office suite.

Certifications:

- Volkamer Lab: TeachOpenCADD (DOI:10.5281/zenodo.1486226).
- HarvardX: PH526x – Using Python for Research.

Personal Skills:

- Excellent scientific communication skills with experience presenting research findings.
- Languages: English (Native), Macedonian (Fluent).
- Right to work in the UK and EU/EEA.
- Full UK driving licence.

Interests:

- Scuba diving (SSI advanced open water certified, 40+ dives)
- Boulder/climbing (grade V6-7/6c+)
- Practitioner of Muay Thai (5 years).