Owain **West**

✉ owest@sas.upenn.edu | 🏠 owainwest.com | 🐙 owainwest | in owainwest

A sharp analytical mind and strong communicator, Owain is an ideal candidate for technically, intellectually, and interpersonally demanding roles. See **owainwest.com** to learn more.

Experience

TickPick | Data Engineer
New York | May 2022 - Present

- Responsible for managing and building on TickPick's cloud data infrastructure to orchestrate analytical data flows throughout the organization. In regular discussion with C-level company leadership to inform data strategy.
- Leading operation of our Airflow, Snowflake, dbt, Fivetran, Hightouch, Azure Data Factory, and Stitch deployments, and building data flows with those tools. Managing the ingest and egress of approx. 200million rows/month from our Snowflake deployment in service of a number of business deliverables and areas, including dashboarding, predictive modelling, and growth marketing.
- Maintaining >50 extant data pipelines and built >1dozen more, including for a number of nontrivial data sources. Eg automated ingest of Apple "App Store Connect" referrer data that is not available via ASC's publicly documented API.

Thinknum Alternative Data | Junior Data Engineer
New York | Jan-March 2022

- Built ETL pipelines for extraction and ingest of open web data. Worked with Redis, PostgreSQL, Beautifulsoup, Selenium, Django, Gremlin, to build a scalable system for data procurement. E.g.: built pipeline to ingest detailed info on >5mil top Stackexchange users.
- Authored library for automated creation of bespoke Python parsing and handler classes for JSON+ld/RDFa/microdata that loosely matches Schema.org schemata, enabling hugely more general extraction of financially relevant open web data compared to previous internal technique.
- Implemented DevOps and testing requirements, including BlazeMeter and NewRelic monitoring.

University of Waterloo | CS Teaching Assistant
Waterloo, CAN | Sep 2019 - Dec 2021

CS 135 (Design of Func. Programs), CS 245 (Logic + Computation), CS 330 (Management Info Systems). 1/sem.

- Responsible for grading assignments and exams, communicating feedback effectively to students, and giving input for course development.

University of Pennsylvania | (Head) Teaching Assistant
Philadelphia | Jan-May, 2017-2019

LGIC 010 (Intro Formal Logic – TA 2017, Head TA 2018+2019); CIS 160 (Discrete Math for CS – TA 2018)

- For LGIC 010: coauthored an introductory **textbook** for use in class. As Head TA in 2018, 2019: lead other TAs and helped develop curriculum.
- For both: taught weekly recitation and office hour sessions, graded evaluations, and communicated feedback about course development.

Royal Bank of Canada, Toronto Innovation Lab | Software Engineer Intern/Summer Hire
Toronto, CAN | May-Aug, 2017-19

- 2019: Continued development of conversational applications for Alexa and Google Home, including production versions of previously instigated PoCs. Developed pipeline for automated evaluation of semantic quality of text summarizations created within natural-language dialog systems.
- 2018: Designed + developed multiple conversational application PoCs. Interviewed external software firms to join internal projects. Trained deep learning NLP functionality for use in conversational and data-insight applications, including for text classification, topic modelling, and custom named-entity-recognition models. Developed a machine-vision based table parser; provisional patent was received for resulting work.
- 2017: Designed and built a chatbot to automate developer onboarding process. Championed internal research and development of experimental Alexa/Google Home products.

UPenn Student Federal Credit Union | Supervisory + Information Systems Committees
Philadelphia | Sept-May, 2016-2018

- Enacted regular audits to comply with Federal regulations. Troubleshot and consulted on the SFCU's digital infrastructure and web presence.

Bridge: Freshman Mental Wellness | Founder, Co-President
Philadelphia | Sep 2015 – May 2017

- Founded and developed Bridge, a student organization at UPenn that provided peer-based mental health support for freshmen.

University of Pennsylvania | (Senior) Information Technology Advisor
Philadelphia | Sep-May, 2015-2017

- Solved network and security problems for university members. As senior ITA in Sept-May 2016-17, oversaw and coached other ITAs.

Skills

Personal

- **Strong**: Presentation ability • Communication • Adaptability • Drive to succeed • Analytical Reasoning • Empathy • Leadership • Teamwork Problem-solving • Independent research • Quantitative thinking • Teaching ability • Emotional intelligence • Visual and verbal thinking

Technical

- **Languages**: Julia • Python • SQL • NodeJS • K • OCaml • Rust • TLA+ • Lean 4
- **Clouds**: AWS, Azure, GCP • **ELT/ETL/Data Engineering** Airflow, Prefect, dbt, Fivetran, Hightouch, Stitch, Azure Data Factory, Kafka, REST APIs, Great Expectations • **Data Warehouse**: Snowflake, BigQuery, RedShift • **SQL&NoSQL**: PostgreSQL, Redis, MongoDB, ElasticSearch • **Dashboard**: Looker, Tableau • **Deployment**: Docker, Kubernetes • **CI/CD**: Jenkins, Azure DevOps, Github Actions • **Web framework**: Django, Flask, React • **Dialog system**: Alexa, Dialogflow, Azure Bot Service • **ML and Data Science**: Pandas, NumPy, SciPy, PyTorch, Tensorflow, Keras, Flux (Julia), Spark, Machine Learning Ethics • **NLP**: NLTK, BERT, spaCy, syntactic and ML methods • **Proteomics**: Language models, BLAST, Uniprot • **Web scraping**: Requests, Selenium, Puppeteer, BeautifulSoup, Scrapy, Apify • **Other**: Unix, Git, Bash, Powershell, Pandoc, LaTeX, Iterable

Education

University of Waterloo | MMath in Computer Science
Waterloo, CAN | Sep 2019 - Dec 2020

- **Selected graduate coursework, $\geq 90\%$ (equiv. A+) grade:** Advanced Topics in Bioinformatics (Machine Learning in Proteomics); Adv. T. in AI (Fairness, Accountability, and Transparency in ML); Adv. T. in Algorithms and Complexity (Automatic Sequences); Computer-Aided Verification

University of Pennsylvania | BA, Magna Cum Laude
Philadelphia | Sep 2015 - May 2019

3 Majors, in: Logic, Info., and Computation; Computer Science; Philosophy and Science

- **Selected graduate coursework, $\geq$ A- grade:** Intro Logic and Computability; Topics in Logic (Modal Logics); Topics in Logic (Set Theory); Differential Geometry; Networked Systems; Topology; Finite Model Theory and Descriptive Complexity; Topics in Cosmology (Galactic Dynamics)
- Was selected by LGIC (Logic, Information, and Computation) department head to be the departmental flagbearer at convocation.