Owain West

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

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

Experience

TickPick | Data Engineer   *New York | May 2022 - Present*

- Leading TickPick's Data Engineering efforts, responsible for architecting and implementing solutions to orchestrate data flows across the organization. In regular discussion with C-level leadership to inform data strategy, and in close collaboration with stakeholder team members.
- Leading operation of our **Airflow, Dagster, Snowflake, Azure Data Factory, Fivetran, Hightouch,** and **Stitch** deployments, and building data flows interfacing with those and other tools, including **Azure Functions**, **dbt**, **Databricks (Spark)**, and **Looker**. Managing all company ingest and egress from Snowflake across numerous business deliverables, including predictive ML models, dashboarding, and growth marketing.
- Built and maintaining >250 ETL pipelines leveraging modern data tools, many involving nontrivial data sources, targets, or processes. Eg automated integration of detailed Apple "App Store Connect" referrer data not available via ASC's publicly documented API.
- Leading team transition from wide legacy mix of tooling to global asset orchestration with Dagster, among other initiatives supporting maintainability and data engineering standards, including adoption of a lineage-aware data catalog and consolidation of managed ETL tool providers.
- Designed process for automating inbound transfers of externally delivered tickets, enabling high-value broker-to-broker application features.

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

- Built dozens of ETL pipelines for extraction of open web data, including eg. to ingest detailed info on >5mil top Stackexchange users.
- Authored library for automated creation of parsers for Schema.org metadata, enabling hugely more general extraction of relevant data compared to previous internal technique. Implemented DevOps requirements, including BlazeMeter and NewRelic monitoring.
- Elected to resign on ethical grounds after being asked to scrape military-related data to sell, and before the company failed to pay its employees.

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 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. Championed development of internal Alexa/Google Home applications.

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

Technical

- **Languages**: Julia • Python • SQL • NodeJS • K • OCaml • Rust • Java • TLA+ • Lean 4
- **Clouds**: AWS, Azure, GCP • **ELT/ETL/Data Engineering** Airflow, Prefect, dbt, Fivetran, Hightouch, Stitch, Azure Data Factory, Azure Functions, AWS Lambda, Azure Event Hubs, GCP Cloud Functions, GCP Pub/Sub, Kafka, REST APIs, Great Expectations • **Data Warehouse**: Snowflake, BigQuery • **SQL&NoSQL**: PostgreSQL, Redis, MongoDB • **Dashboard**: Looker, Tableau • **Machine Learning and Data Science**: Pandas, NumPy, PyTorch, Tensorflow, Keras, Flux (Julia), Spark, ML Ethics • **NLP**: NLTK, spaCy, BERT • **Dialog system**: Alexa, Dialogflow • **Proteomics**: Language models, BLAST, Uniprot • **Web scraping**: Requests, Selenium, Puppeteer, BeautifulSoup, Scrapy, Apify • **Deployment/CI+CD**: Docker, Kubernetes, Azure DevOps, Github Actions • **Web framework**: Django, Flask, React • **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 AI (**Fairness, Accountability, and Transparency in ML**); Adv. T. in Bioinformatics (**Machine Learning in Proteomics**) Adv. T. in Algos. 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 as the departmental flagbearer for convocation.