

WOJCIECH BAŻANT

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Code: <https://github.com/wbazant>

SUMMARY

Highly skilled Data Engineer with a robust background in bioinformatics and software development. Experienced in full-stack development, data pipelines, and backend engineering, with a strong commitment to delivering high-quality, scalable solutions that meet business and research needs. Known for being a proactive team player with excellent problem-solving skills and a dedication to continuous learning and improvement.

CORE SKILLS

- Python, Java, Perl, Javascript, Bash, Scala
- Data Modeling
- Workflow Design
- Unix/Linux
- SQL
- Bioinformatics
- Cloud Solutions
- ETL
- Git

PROFESSIONAL EXPERIENCE

Data Engineer, Ethermed

Remote, Jan 2023 — Apr 2024

- Second tech hire at a healthcare AI startup after seed funding
- Implemented custom decision making modules and their integration with data flow of an early prospective client, leading to the client signing the contract
- Owned data access, helped ML engineers create training features, and evaluated machine learning models they produced
- Created the company's first operation dashboards and reliability procedures
- Provided code reviews and code architecture for a pilot project involving using LLMs for question evaluation in the context of prior authorizations
- Prototyped a requirements-to-code project pairing LLM codegen with abstract syntax tree manipulation
- Wrote a parsing pipeline for insurers' medical guideline documents
- Tech Stack: Data Engineer, Python, MLOps, LLM, Databricks, PySpark, Pandas

Data Engineer - Freelance, Deep Tech Jobs

Remote, Jul 2022 — Sep 2022

- Freelancer for a 'deep tech job' search platform
- Designed and developed a replacement for a low-code integration between a web scraping SaaS and a CMS board based on AWS Lambda and Python
- Extended the integration with data cleaning and annotation modules requested by the client
- Tech Stack: Data Engineer, Python, Serverless, Elasticsearch, Amazon Lambda, Web scraping, CMS, Pandas

Programme & Data Analyst, University of Glasgow

United Kingdom, Apr 2022 — Feb 2023

- Bioinformatician on VEuPathDB bioinformatics team with role focusing on genomic sites
- Designed and developed a Java microservice ([see code](#)) that currently powers sequence retrieval across over 10 VEuPathDB sites
- Designed and developed a .bed based interface for sites to query the microservice that facilitated implementing many requested functions and clearing a multi-year backlog
- Deprecated a CGI-based legacy sequence retrieval service using application database storage for sequences, which addressed global performance issues caused by the service
- Tech Stack: Data Engineer, Backend Engineer, Perl, Java, Spring Boot, SQLite

Bioinformatics Application Developer, Senior (D), University of Pennsylvania

United States, Oct 2019 — Jun 2022

- Bioinformatician on VEuPathDB bioinformatics team with role owning MicrobiomeDB.org
- Developed a Nextflow pipeline for whole genome metagenomics data ([see code](#)) which allowed the project to show studies with more accurate results
- Designed and developed an ingestion point for users' own datasets
- Initiated a collaboration with a NIH Nephela, a resource offering free processing of metagenomic sequencing data, that led to over a thousand researchers viewing their data through MicrobiomeDB
- Developed a tool based on novel method for identifying eukaryotes in WGS samples, produced a study that demonstrated its efficacy, and led the writing of a publication accepted by a major journal ([Improved eukaryotic detection compatible with large-scale automated analysis of metagenomes | Microbiome](#))
- Tech Stack: Data Engineer, Data Scientist, SQL, Unix, Perl, Python, Make, Makefile, Pandas, Nextflow

Bioinformatician, Wellcome Sanger Institute

United Kingdom, Sep 2017 — Jun 2019

- Bioinformatician with role split between the Berriman lab at Wellcome Sanger Institute and the Wormbase team at the European Bioinformatics Institute
- Operated and continuously improved data production processes for WormBase ParaSite, resulting in five successful releases ([see release notes](#))
- Conducted automated quality assessment and data loading for the genome of a parasitic nematode *H. contortus*, becoming a named co-author in a publication in one of the best science journals, Nature ([publication link](#))
- Designed and developed an ingestion point paired with an annotation processing pipeline ([code link](#)) which resulted in WBPS gene pages being enriched with results of transcriptomic studies and review pages summarising public availability of approximately all transcriptomic data for each organism
- Responsible for supporting users of the site internally in Berriman lab, and externally through help desk queries, helping lab scientists access genomic data relevant to their research
- Made conference posters and operated a booth, representing the resource in three parasitology conferences
- Tech Stack: Bioinformatician, Data Production, Data Modelling, SQL, Unix, Perl

Software Developer, European Bioinformatics Institute

United Kingdom, Mar 2016 — Sep 2017

- Full stack developer in three person development team for the Expression Atlas group
- Worked in the Agile framework on the Java backend ([code link](#)) and React frontend ([code link](#))
- Developed an annotation pipeline ([code link](#)) which helped the group evaluate Scala as alternative to pipeline development strategy of mixing R, Bash, and Perl
- Tech Stack: Full-Stack Engineer, Java, Spring Framework, TDD, Apache Solr, Scala, R, Bash, Perl, React, JavaScript, NPM, Webpack

Technology Associate, Morgan Stanley

United Kingdom, Jul 2014 — Mar 2016

- Junior developer for an internal product providing P&L and risk assessment calculations for the bank's front office divisions under Interest Rate Derivatives
- Worked in the Agile framework on a Java application, its Scala API, and a Hazelcast distributed cache backend
- As part of on-call rota, diagnosed and triaged urgent production issues
- Tech Stack: Backend Engineer, Java, Hazelcast, Scala

Summer Intern, Infosys

India, 2013

- Summer intern at a research division of a large software development company
- Researched encoding of business compliance rules with model checking

Tutor, Akademeia

Poland, 2010 — 2013

- Math and physics tutor for an elite educational consulting and services company
- Supported over 50 students in preparation for exams, university interviews, and continuing education

EDUCATION

MMath, Mathematics, University of Oxford

United Kingdom, 2013 — 2014

First Class Honors

BA, Mathematics, University of Oxford

United Kingdom, 2010 — 2013

Upper Second Class Honors

NON-PROFIT

Falling Fruit

2024 — present

- Contributor and maintainer for a popular portal for foragers
- Took over stalled project to replace the current aging site and app and lifted it from a prototype-quality alpha to nearing readiness for rollout ([code link](#))
- Organised Hacktoberfest and integrated efforts of twenty participants
- Tech Stack: Frontend Engineer, React, Redux, LLM

United World Colleges

2016 — 2022

- Volunteer developer for the Polish committee
- Built an application platform and a pipeline for automatically anonymising and packaging applications for grading, removing repetitive manual work and assuring efficiency and fairness

- Operated the platform for eight years, providing tech support for applicants
- Tech Stack: Full Stack Engineer, AngularJS, Python, Google App Engine

QUANTITATIVE SKILLS

Data Engineering and Bioinformatics:

- **Data Pipeline Development:** Designed and implemented efficient data pipelines
- **Database Design and Management:** Optimized data ingest processes and schemas
- **Big Data Technologies:** Utilized PySpark, Databricks, and Pandas for analysis
- **Cloud Solutions:** Implemented AWS and Google App Engine for scalable solutions
- **Microservices and Serverless Architecture:** Developed microservices and serverless architectures
- **ETL Processes:** Ensured efficient data flow and transformation

Mathematical and Statistical Analysis:

- **Statistical Modeling:** Applied statistical methods for genomic data analysis
- **Machine Learning:** Evaluated and implemented machine learning models
- **Data Visualization:** Presented complex data in accessible formats
- **Algorithm Development:** Created algorithms for genomic data processing

Programming and Scripting:

- **Python:** Extensive experience in data engineering and analysis
- **Java and Scala:** Proficient in backend development and data processing
- **Bash and Perl:** Automated data processing tasks efficiently
- **Javascript:** Built modern single page applications

PERSONAL SKILLS

- **Communication** Effective in conveying complex ideas clearly and concisely
- **Teamwork** Collaborates well with cross-functional teams to achieve common goals
- **Problem-Solving** Analytical thinker with a knack for innovative solutions
- **Adaptability** Quickly adapts to new technologies and changing project requirements
- **Time Management** Efficiently prioritizes tasks to meet deadlines and maintain productivity
- **Leadership** Guides and mentors team members to foster a productive environment
- **Attention to Detail** Ensures high-quality output through meticulous review and testing
- **Continuous Learning** Actively seeks new knowledge and skills to stay current in the field
- **Project Management** Organizes and manages projects effectively using Agile methodologies

LANGUAGES

- **Polish:** Native Language
- **English:** Fluent
- **German:** Conversational basics
- **Russian:** Intermediate

HOBBIES

chess, foraging, hiking, kayaking, gardening