# **WOJCIECH BAŻANT**

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Code: https://github.com/wbazant

### **SUMMARY**

Experienced data professional with a background spanning bioinformatics, machine learning infrastructure, and software development. Proven track record of tackling difficult problems, taking initiative, and making impact through cross-functional collaboration. Known for a practical, delivery-focused mindset shaped by startup and academic experiences, and a dedication to continuous learning and improvement.

### **CORE SKILLS**

- Python, Java, Perl, Javascript, Bash, Scala
- Data Visualization
- MLflow
- Unix/Linux
- SQL
- Bioinformatics
- Cloud Solutions
- ETL
- Git

# PROFESSIONAL EXPERIENCE

#### **Bionformatics Software Engineer, Syngenta**

Remote, June 2025 — present

- Contractor through Shelgate Ltd and Infosys UK for Syngenta's seed genomics division
- Completed the initial three month project to build an ETL pipeline for an internal use tool for visualising genomic data
- Successfully pitched a design for a pipeline processing genetic marker data, resulting in client extending the engagement to commission the implementation
- Tech Stack: Bioinformatics Software Engineer, Python, ETL, MariaDB, Nextflow, Persephone genome browser

#### Career break

Remote. Apr 2024 — June 2025

Took a planned year-long break following the birth of my child to focus on parenting

Explored start-up ideas and contributed to pro bono initiatives

### 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, Databricks, PySpark, Pandas, MLFlow, PyTorch

#### **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 2021 — Feb 2023

- Bioinformatician on VEuPathDB bioinformatics team with role focusing on genomic sites
- Designed and developed a Java microservice (<u>code link</u>) 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, Oracle, SQLite,
   Docker

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

United States, Oct 2019 — Jun 2021

- Bioinformatician on VEuPathDB bioinformatics team with role owning MicrobiomeDB.org
- Developed a Nextflow pipeline for whole genome metagenomics data (<u>code link</u>) 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 Nephele, 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 (<u>Improved eukaryotic detection compatible with large-scale</u> 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, Jan 2018 — 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 (<u>code link</u>) 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 — Jan 2018

- 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

- Developed an annotation pipeline (<u>code link</u>) 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, PostgreSQL

# **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 and university interviews

# **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
- Wrote an LLM workflow for internationalization into twelve languages
- Tech Stack: Frontend Engineer, UX, 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 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
- Nextflow: Built bioinformatics workflows for cloud and cluster 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