# **WOJCIECH BAŻANT**

Email: wojciech.bazant@gmail.com
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
- Data Modeling
- Workflow Design
- Unix/Linux
- SQL
- Bioinformatics
- Cloud Solutions
- ETL
- Git

## PROFESSIONAL EXPERIENCE

Data Engineer, Ethermed Jan 2023 — Apr 2024

- Second tech hire at a healthcare AI startup post-seed funding
- Developed data access code, decision-making modules, and evaluated machine learning models
- Implemented the first client integration and handled deployment and reliability operations until a DevOps hire
- Reviewed code, mentored colleagues, and helped the company meet its key client goals
- Tech Stack: Data Engineer, MLOps, LLM, Databricks, PySpark, Pandas

#### Data Engineer - Freelance, Deep Tech Jobs Jul 2022 — Sep 2022

 Improved processes for a 'deep tech job' search platform using a content management system

- Modeled data boards with Python, integrated web scraping SaaS, and migrated computation to AWS Lambda
- Reduced job search times from over five seconds to under a second by moving data from DynamoDB to an OpenSearch index
- Tech Stack: Data Engineer, Python, Serverless, Elasticsearch, Amazon Lambda, Web scraping, CMS, Pandas

## Programme & Data Analyst, University of Glasgow Apr 2022 — Feb 2023

- Collaborated with the infrastructure team to modernize VEuPathDB's data provision infrastructure
- Developed a web application using Java in the microservices paradigm and a data workflow producing files
- Improved performance and added features, currently live on plasmodb.org and other VEuPathDB sites
- Tech Stack: Data Engineer, Backend Engineer, Python, Java, Spring Boot, SQLite

# Bioinformatics Application Developer, Senior (D), University of Pennsylvania *Oct 2019 — Jun 2022*

- Responsible for the MicrobiomeDB.org portal
- Developed solutions for whole genome metagenomics (WGS) data and created a new pipeline using Nextflow
- Processed about six thousand samples, ensuring open access to publicly funded human microbiome data studies
- Invented CORRAL, a novel method for identifying eukaryotes in WGS samples Published a major journal article as the first author (http://doi.org/10.1186/s40168-023-01505-1)
- Tech Stack: Data Engineer, Data Scientist, SQL, Unix, Perl, Python, Make, Makefile, Pandas, Nextflow

#### Bioinformatician, Wellcome Sanger Institute Sep 2017 — Jun 2019

- Maintained WormBase ParaSite, coordinating large-scale data production processes
- Developed new pipelines in Perl and supported scientists using the site
- Tech Stack: Backend Engineer, Database Engineer, Data Engineer, Data Scientist, SQL,
   Data Modeling, Unix, Perl

## Software Developer, European Bioinformatics Institute Mar 2016 — Sep 2017

- Overhauled the Expression Atlas backend to support more data types and formats
- Improved data ingest code and maintained bioinformatics pipelines
- Ported experiment and gene pages to a single page framework using React Router
- Tech Stack: Full-Stack Engineer, Java, Spring Framework, TDD, Apache Solr, DDD, Scala, R, Bash, Perl, React, JavaScript, NPM, Webpack

## **Technology Associate, Morgan Stanley** *Jul 2014 — Mar 2016*

- Core developer for a Java application on top of a Hazelcast distributed cluster
- Developed features and bug fixes for backend applications in Java and Scala
- Tech Stack: Backend Engineer, Java, SQL, Scala

#### **EDUCATION**

MMath, Mathematics, University of Oxford 2013 – 2014 First Class Honors BA, Mathematics, University of Oxford 2010 – 2013 Upper Second Class Honors

## **QUANTITATIVE SKILLS**

#### **Data Engineering and Bioinformatics:**

- Data Pipeline Development: Designed and implemented efficient data pipelines
- Database Design and Management: Optimized data ingest processes for integrity and performance
- **Big Data Technologies:** Utilized PySpark, Databricks, and Pandas for large-scale data 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

## **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
- Client Relations Builds strong relationships with clients through professionalism and reliability
- Project Management Organizes and manages projects effectively using Agile methodologies

## **LANGUAGES**

• Polish: Native Language

• English: Fluent

• German: Conversational basics

• Russian: Intermediate

#### INTERESTS

chess, Go, slacklining, hiking, kayaking, gardening