

Jan Domanski

SOFTWARE DEVELOPER · CHEMIST · STARTUP FOUNDER · FORBES 30 UNDER 30

☎ (+44) 750-220-7767 | ✉ jandom@gmail.com | 🌐 www.jandomanski.com | 📱 jandom | 📺 jandomanski

Experience

Labstep

London, United Kingdom

CO-FOUNDER & CTO (2017 - PRESENT)

- **Key result** Selected as one of 5 out of 400 European startups to join the Google Campus Residency program in 2018
- **Key result** Obtained over 1,750,000 GBP in seed funding, oversaw company growth and acquired first paying commercial customers
- Built a web platform for scientists to collaborate within groups – sharing their results and methods more efficiently
- The platform had over 15,000 researchers with over 300+ daily actives from both academia and industry
- Led a technical team, mentoring and coaching its members (question driven mindset, nonviolent communication), with no team members departing over 3 years
- Adopted a pragmatic, Agile-inspired methodology to deliver on time, with a code-quality mindset to retain top engineering talent
- Balanced requirements from sales, paying customers, and other stakeholders to provide a technical roadmap
- Directed a transition into a more data-driven decision making process, resulting in 1st week user retention improvement from 20% to 40%
- Collaborated closely with technical counterparts at external institutions and customers, providing technical guidance to sales and strategy
- Took complete responsibility for the infrastructure (AWS, Pulumi), reliability and monitoring (Datadog) and data-room analytics (Python/SQL)

Oxford University

Oxford, United Kingdom

AWARDED A PHD IN COMPUTATIONAL BIOPHYSICS, 4 YEARS FUNDED BY WELLCOME TRUST (2013 - 2017)

- **Key result** Implemented novel sampling method in C++ that allowed us to crack the problem we faced and publish our results
- Worked on modeling protein folding inside cell membranes
- Used statistical mechanics to interpret the results of simulations and compare to experiment
- Analyzed and visualized the simulation data using Python (numpy, pandas, matplotlib), validated the simulation results against experiment
- Mentored and tutored master and younger PhD students within the lab

D. E. Shaw Research

New York City, USA

SCIENTIFIC SOFTWARE DEVELOPER (2011 - 2013)

- **Key result** Completed a first collaboration project between Agios Pharmaceuticals and D. E. Shaw Research
- Supported senior computational and medicinal chemists by writing and testing analysis scripts in Python
- Performed and analyzed molecular dynamics simulations of "undruggable" proteins with aim of identifying cryptic or allosteric binding sites for small molecules
- Performed massively parallel, distributed docking calculations to identify drug candidates
- Analyzed and visualized data for own research projects using Python (numpy, matplotlib)

Education

Oxford University

Oxford, United Kingdom

MASTER OF BIOCHEMISTRY

2007 - 2011

- New College Scholar award for obtaining a 1st class degree during 3rd year exams
- Supplementary subjects in Heterocyclic, Pharmaceutical Synthesis, and Membrane Proteins

Technologies

Python

PYTHON IS THE LANGUAGE I USED MOST IN MY RESEARCH

- Data science and wrangling using pandas, numpy, matplotlib
- Dashboards and analytics written in Python
- Handling 100s GBs of simulation data over multiple machines
- Basic machine learning using Keras and TensorFlow (side-projects)

Infrastructure

COMING FROM A HIGH-PERFORMANCE COMPUTING BACKGROUND, I LIKE INFRASTRUCTURE-RELATED PROBLEMS

- Built a cloud-native infrastructure stack, starting from a simple AWS Console prototype
- Pioneered the use of Pulumi (a Terraform successor), to provide declarative infrastructure deployments
- Migrated web server workloads to AWS ElasticBeanstalk with multi-container Docker
- Familiar with a large fraction of AWS services: Lambdas, ElasticSearch, ElasticBeanstalk, ElasticCache, CloudFront
- Application Performance Monitoring: proposed and implemented the use of Datadog across the fleet
- Set up and used nearly all continuous integration systems available: Github Actions, CircleCI, Travis

TypeScript

TYPESCRIPT THAT ALLOWED US TO REGAIN CONTROL OF OUR REACT WEB APP

- Built up from a demo app to a full-blown React single-page app, with highly re-usable CRUD containers
- Used redux for action management, persistence management in the browser storage, version updates via service workers
- Migrated the application from JavaScript to TypeScript to ease maintenance and improve team productivity

PHP

PHP IS HOW I GOT INTO CODING

- Big fan of static code analysis and testing: they ease cognitive load and help ensure high-quality code is shipped
- Relentless focus on testing: unit test coverage for Labstep's backend was 100%
- PHP allowed us to build a cost-efficient prototype before any funding
- The language powers Labstep's backend REST API (an application based on the Symfony framework)

Skills

Interpersonal	Professional and easy-going as a team member, happy to work independently
Conflict resolution	Using nonviolent communication framework and question-driven mindset to gather data and drive behavior change
Leadership	Daily mentorship and decision making, navigating the product, release and migration landscapes
Open-source	Contributor to community libraries: Elasticsearch and FOSElasticBundle (PHP), MDAnalysis (Python), Plumed (C++)
HPC	Compiled and ran massively parallel physics simulations on TOP500 super-computers (TITAN)
Languages	Polish (native); English (near-native); German and Russian (basic)
Hobbies	Organize a monthly London Hack&&Tell meetup with 1,100+ members (link)

Honors & Media

AWARDS

2018 **Laureate**, Forbes 30 Under 30 - Europe - Science & Healthcare ([link](#)) *European List*

MEDIA

2019 **TV Interview**, Coverage of the mayoral visit to Warsaw ([link](#)) *BBC London*
2019 **Article**, Labstep wants to solve the research reproducibility crisis ([link](#)) *Sifted*
2019 **Podcast**, Working scientist podcast: How technology can help solve science's reproducibility crisis ([link](#)) *Nature*
2019 **Article**, Google has a new pitch for startups outside London's tech scene ([link](#)) *Wired*
2018 **Article**, From Dinosaurs To Bionic Limbs: The 2018 Europe 30 Under 30 In Science And Healthcare ([link](#)) *Forbes*
2018 **Article**, Labstep wants to fix the way science experiments are recorded and reproduced ([link](#)) *TechCrunch*

Publications

GOOGLE SCHOLAR PROFILE

A link to the profile can be found [here](#)