

Dawid Laszuk, PhD

Vancouver, Canada
+1 778 706 6550
contact@dawid.lasz.uk
<https://laszukdawid.com>
Linkedin [/in/laszukdawid/](#)

Machine learning engineer with a PhD in maths and optimization. About 15 years of experience in building full-stack AI solutions, mainly in Python.

KEYWORDS

GenAI, LLM, machine learning, Python, golang, AWS, reinforcement learning, services, MLOps, GenAIOps

EXPERIENCE

Sailpoint, Staff Machine Learning Engineer

February 2022 - PRESENT

Core contributor to all Generative AI initiatives at Sailpoint. Tech lead on the GenAI team, earlier the lead on the MLOps team. Principal designer for the machine learning and GenAI platforms. Advocating and implementing AI best practices, setting up templates, workflows and building out ML infrastructure. Co-owning chatbot with rich GenAI capabilities.

Agents Bar, Solo founder, All hats

March 2021 - May 2022

Agents Bar provides deep reinforcement learning agents as a service. Agent management is either through web console or API clients. Users can create and train hundreds of agents simultaneously. All frontend is written TypeScript with the usage of nuxt.js whereas backend services are in Python and golang. Infrastructure is in Terraform with microservices orchestration using Docker Swarm. The core machine learning logic is written using PyTorch and published as AI Traineree.

Tigera, Sr. Machine Learning Engineer

October 2021 - February 2022

Holistic focus on providing analytical approaches to increase security in the infrastructure, mainly Kubernetes. Reviewing and contributing to anomaly detection solutions. Leading runtime security threat detection.

Amazon, Software Developer Engineer

June 2017 - September 2020

Designed, led and implemented solutions with analytical approaches, mainly machine learning. Projects often spanned multiple teams of developers, scientists and business leaders. Most projects were built natively in AWS and some on legacy internal infrastructure.

Lead developer on productionalizing reinforcement learning solution. Set readiness guidelines for machine learning software and models. Prototyped a simulation for real-life mechanisms which ran thousands of experiments to infer business decisions. Came up with business metrics and set up the whole ETL pipeline. Processed petabytes of raw data using EMR to determine product's missing and new properties.

Evertz Microsystems, Software Developer Engineer

January 2016 - January 2017

Contributed to an existing web application with backend in Java, MySQL database and UI both in ActionScript3 and jQuery. Scripting required using Python, JavaScript and system scripts.

Titanis, Python developer

January 2010 - January 2012

Designing and developing a framework for brain-computer interfaces. Rewriting from MatLab and creating original implementations for various data processing algorithms in Python using NumPy, Scipy, Scikit-learn and Matplotlib. Explaining methods to the team and designing experiments to validate approaches.

EDUCATION

University of Reading, UK — PhD

October 2012 - November 2016 (title obtained Mar 2018)

KurSL: a model of coupled oscillators based on Kuramoto's coupling and Sturm-Liouville theory

Modelling a general system of mutually interacting components with periodic states inspired by brain activity.

Work required implementing analytical solutions including solving coupled differential equations and optimizing using Monte Carlo Markov Chains.

University of Warsaw, Poland — MSc in Physics, BSc in Physics

Thesis: *Analysis of experimental data for hybrid BCI systems.*

Combined an open-sourced eye tracking device with a previously implemented brain-computer interface (BCI) paradigm. The project required hardware and software designs and integrating all with OpenBCI.

PROJECTS

PyEMD — Open Source

Link: <https://github.com/laszukdawid/PyEMD>

Python implementation of Empirical Mode Decomposition method. The de-facto standard for the method. Over 500 stars on GitHub.

AI Traineree — Open Source

Link: <https://github.com/laszukdawid/ai-traineree>

Package providing (deep) reinforcement learning solutions.

HomeHero - Application in making

Link: <https://homehero.pro>

Multi-platform application to manage household inventory, chores, documents and anything useful.