Anna-Lena Popkes
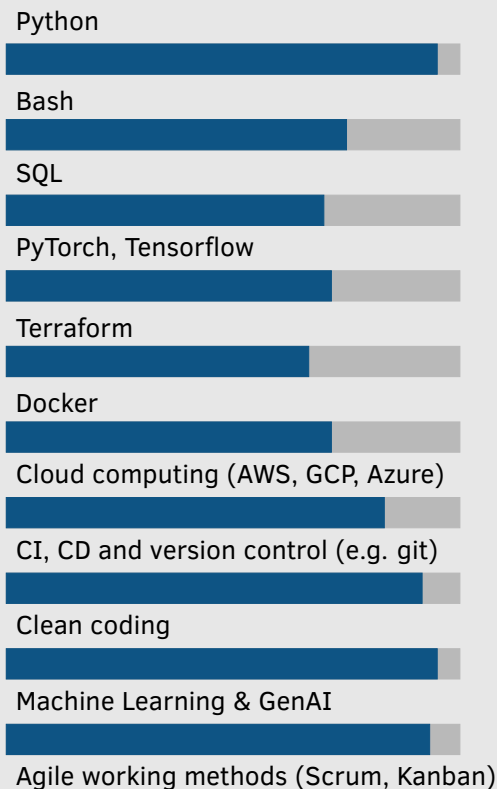
Machine Learning Engineer

✉ Bonn, Germany

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About me

I am an enthusiastic learner always looking for new challenges to expand my knowledge and skills. I am deeply fascinated by machine learning and its applications to questions that affect and benefit society. This translates into a passion for teaching, where I can share my insights and contribute to the collective growth of the machine learning community.

Skills

Python

Bash

SQL

PyTorch, Tensorflow

Terraform

Docker

Cloud computing (AWS, GCP, Azure)

CI, CD and version control (e.g. git)

Clean coding

Machine Learning & GenAI

Agile working methods (Scrum, Kanban)

Experience

02/2020-today — Senior Machine Learning Engineer — inovex GmbH

inovex is an IT project center driven by innovation and quality, focusing its services on digital transformation. Projects worked on:
- 06.2023-today (under NDA). Working in the speech recognition team. Main tasks are setting up an MLOps pipeline in AWS, taking existing ML models into production.
- 02.2023-today (inovex). Lead developer and teacher of inovex Python trainings.
- 04.2023 - 11.2023 (inovex). Supervision of bachelor thesis in the field of LLMs. Title "A Question Answering-based Search Engine for Bachelor and Master Theses Documents".
- 09.2022 - 08.2023 (under NDA). Development of a forecasting engine.
- 09.2022 - 12.2022 (under NDA). Python Code Quality Coaching.
- 06.2021 - 12.2021 (inovex). Supervision of master thesis in the field of recommender systems.
- 07.2021 - 10.2021 (under NDA). Creation of a POC on the topic of consumer decision trees.
- 04.2021 - 07.2021 (under NDA). Creation of a POC on the topic of demand forecasting.
- 02.2020 - 04.2021 (under NDA). Conceptual design and implementation of a data lake in the Google Cloud.

10/2018-10/2019 — Machine Learning Engineer (AI Resident) — Microsoft Research

One of the first participants in the Microsoft AI Residency program in Cambridge, UK. The AI Residency is an educational program, focused on teaching skills necessary for becoming an excellent research/machine learning engineer. Within the program I worked in the role of a full-time research engineer, applying machine learning to real-world problems. Example project: Interpretable Outcome Prediction with Sparse Bayesian Neural Networks in Intensive Care.

05/2018-10/2018 — Deep Learning Internship — Bosch Center for AI

Working in the Bosch Center for AI (Palo Alto, CA, USA) on deep learning projects, mostly focused on computer vision applications and image recognition tasks.

Education

2015-2018 — Master's degree computer science — University of Bonn

GPA 4.0, Grade average: 1.0. Thesis: "Language Modeling with RNNs"

2012-2015 — Bachelor's degree cognitive science — University of Osnabrück

GPA 4.0, Grade average: 1.1

Personal Projects (Selection)

2018-today — Machine Learning Basics — GitHub, 4.2k stars

Plain Python implementations of basic machine learning algorithms

2018-today — Magical Universe — GitHub, 827 stars

Awesome Python features explained using the world of magic

2022 — AI Ethics

Resources for making data science projects more ethical

Talks and Appearances (Selection)

2023 — Guest at world's biggest Python Podcast "Talk Python To Me"

2023 — Talks at EuroPython and PyConDE: *"An unbiased evaluation of environment management and packaging tools"*

2021 — Talk at EuroPython: *"Finding magic in Python"*

2021 — Finalist for the "Digital Female Leader Award 2021"

2021 — Invited speaker at the SpeakUp series of Women in Tech

2020 — Keynote speaker at PyCon Eustonia