

Tom Pollak

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EXPERIENCE

Cisco Meraki

June 2023 – Present

ML Software Engineer – Camera Intelligence Team

Remote, UK

- Independently researched, designed, & implemented a novel unified search experience with a single model.
- Project is set to be the “market differentiator” for the entire MV product line and was demoed at Cisco Live 2024.
- Current Technical lead of a team of 6 engineers & 2 managers to get the project in production with highest priority.
- Also lead a team at the Cisco San Francisco Hackweek 2023 for preliminary work on the project.
- Developed a 10K LOC C++ library, with full testing suite & benchmarks in GTest.
- Created quantized edge device inference equivalent to the original with minimal quantization error.
- Collected and curated a high-quality dataset of >50K images. Finetuned a SigLIP text encoder to align NLP queries.
- Originally hired as a summer intern in 2022, rejoined full-time in 2023. [Intern Reference](#) (Related project)

EDUCATION

University of York

June 2023

BEng. Computer Science – First Class Honours

Lady Manners School

2020

A-Level – Further Maths (A), Maths (A), Computer Science (A), Physics (A)

PROJECTS

Interpretability Research

July 2024 – Present

<https://github.com/tom-pollak/interpretability-culture>

- Working on interpretability research in my spare time. Completing ARENA 3.0 and applied to MATS program.

Claudette Pydantic

July 2024

<https://github.com/tom-pollak/claurette-pydantic>

- Adds Pydantic structured outputs through tool use for the Claudette library – [Example](#).

NLP Image Retrieval with CLIP

September 2022 – June 2023

<https://tom-pollak.github.io/clip-index>

- University dissertation project – graded 80%. Built ImageNet CLIP search. Eval models, indexes, hyperparameters.

Automated Horse Betting Software

December 2020 – July 2021

<https://github.com/tom-pollak/each-way-matcher>

- Discovers undervalued horses in each-way betting by exploiting bookmaker “place” odds.
- Uses an adapted Kelly Criterion strategy to calculate the optimal stake.
- Calculates conditional probability of a horse finishing in a given place using the win odds of all horses.

Poker Web Application

April 2019 – July 2020

<https://github.com/tom-pollak/web-poker>

- Free live poker web app, users can create accounts and tables, play poker, and chat with other players.

SANS Institute

August 2020

FOR500 Windows Forensic Analysis

<https://www.sans.org/cyber-security-courses/windows-forensic-analysis>

- Sponsored by HM government for reaching the final Elite stage of the Cyber Discovery program (2018).

SKILLS

Languages

Python, C++, Cuda C.

ML

PyTorch, Huggingface, Pydantic, Axolotl, llama.cpp, einops, scikit-learn.

Tools

Linux, VSCode, Neovim, Docker, Git, SQLite, \LaTeX .