Tom Pollak

Bristol, UK tompollak1000@gmail.com

EXPERIENCE

Cisco Meraki

ML Software Engineer - Camera Intelligence Team

- Independently researched, designed, & implemented a novel unified search experience with a single model.
- Developed a 10K LOC C++ library, with full testing suite & benchmarks in GTest.
- Currently technical lead of a team of 6 engineers & 2 managers to get the project in production with highest priority.
- My project is set be the "market differentiator" for the entire MV Camera platform and demoed at Cisco Live 2025.
- Lead a team at the Cisco San Francisco Hackweek 2023 for preliminary work on the project.
- Ran guantization aware training to make the model suitable for edge device inference.
- 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 https://github.com/tom-pollak/interpretability-culture	July 2024 - Present
 Working on mechanistic interpretability research in my spare time. 	
Claudette Pydantic https://github.com/tom-pollak/claudette-pydantic	July 2024
Adds Pydantic structured outputs through tool use for the Claudette library – Example 1	mple.
NLP Image Retrieval with CLIP https://tom-pollak.github.io/clip-index	September 2022 – June 2023
University dissertation project - graded 80%. Built efficient NLP image search usin	ng CLIP and Faiss.
Automated Horse Betting Software https://github.com/tom-pollak/each-way-matcher	December 2020 – July 2021
 Discovers undervalued horses in each-way betting by exploiting bookmaker "place" Uses an adapted Kelly Criterion strategy to calculate the optimal stake. Calculates conditional probability of a horse finishing in a given place using the way 	
Poker Web Application https://github.com/tom-pollak/web-poker	April 2019 – July 2020
Free live poker web app, users can create accounts and tables, play poker, and cha	at with other players.
COURSES	
Mastering LLMs	June 2024
SANS Institute – FOR500 Windows Forensic Analysis	August 2020

SKILLS

Languages	Python, C++, Cuda C.
ML	PyTorch, Huggingface, Pydantic, Axolotl, llama.cpp, einops, scikit-learn.
Tools	Linux, VSCode, Neovim, Docker, Git, SQLite, ${ m IAT}_{ m E}{ m X}.$

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> June 2023 - Present Remote, UK