Anselm Coogan *Machine Learning / Computer Vision Software Engineer*

anselm.coogan@gmail.com | github.com/AnselmC | linkedin.com/in/anselm-coogan | U.S. citizen

PROFESSIONAL SUMMARY

Anselm is a software engineer with an M.Sc. in machine learning, computer vision, and robotics. After over 3.5 years of building a computer vision product from 0 to 1 for the retail sector, he is now looking to take his career to the next level by applying his skills more meaningfully and transitioning into AI safety. Anselm has recently participated in BlueDot's AI alignment fast-track course, has deepened his knowledge of foundational models, and is excited about ensuring we build AIs that benefit society.

SKILLS

Programming: Python, C++, Clojure, Emacs Lisp, SQL | **Machine Learning & Computer Vision:** PyTorch (Lightning), OpenCV, Pandas, NumPy, Scikit-Learn | **Databases:** PostgreSQL, Clickhouse, XTDB, MySQL | **Misc:** Docker, Google Cloud Platform, Gitlab CI, Django

PROFESSIONAL EXPERIENCE

Scandit

Senior Software Engineer (ML/CV) & Tech Lead — 2023 Jul – 2025 Mar, Zurich, Switzerland
- Architected ShelfView - a new product enabling retailers to boost sales by 2% through actionable recommendations – multi-million ARR projected for 2025
- Pioneered a full-stack cloud pipeline to create digital twin of a shelf, processing thousands of images per day
- Championed engineering initiatives for cross-functional pilots with major US and European retailers
- Engineered failure analysis tooling & performance tracking systems, empowering 10+ engineers to optimize quality
- Technologies: Python, PyTorch, OpenCV, Django, PostgreSQL, Clickhouse, Metabase, Google Cloud Platform

Software Engineer (ML/CV) — 2022 Jan – 2023 Jun, Zurich, Switzerland
- Built the ShelfView predecessor: robotic data capture solution generating >$1m ARR with major US retailers
- Optimized computer vision pipeline to process >5m images/day
- Innovated embedding-based OCR-text-to-product-name matching, surpassing previous Levenshtein method by 20%
- Technologies: Python, PyTorch, OpenCV, Django, PostgreSQL

Product Engineer — 2021 Jun – 2021 Dec, Zurich, Switzerland
- Architected comprehensive monitoring tools for autonomous data capture software across 300+ store locations
- Delivered 10x cost reduction for deployment troubleshooting through strategic monitoring system implementation
- Technologies: Python, Pandas, NumPy

Brain Corporation, *Robotics Software Engineering Intern* — 2019 Mar – 2019 Sep, San Diego, USA
- Developed and optimized critical features for navigation stack and UI, impacting 10k+ deployed cleaning robots
- Conducted innovative research on single-image camera calibration methodologies
- Technologies: C++, Python, Qt, QML, OpenCV, NumPy

Capgemini, *Software Engineering Working Student* — 2017 Aug – 2018 Feb, Munich, Germany
- Programmed an enterprise-scale repair tracking system for a major automotive client, serving 50k+ employees
- Technologies: Java EE, Spring, Angular

Microstep, *Software Engineering Working Student* — 2017 Mar – 2017 Jul, Munich, Germany
- Conceptualized and implemented an innovative default risk prediction model for SMBs, surpassing 90% accuracy
- Technologies: Python, Scikit-learn

PROJECTS

taskr, *Side-project*
- API-first platform for integrating humans-in-the-loop into any workflow
- Technologies: Clojure, XTDB, Biff, HTMX

le-gpt, *CursorAI-like features for Emacs*
Technologies: Emacs Lisp, Python, OpenAI API, Anthropic API, Prompt engineering

le-thesaurus, *Thesaurus.com integration into Emacs*
Technologies: Emacs Lisp

Re-implemented ORB-SLAM, *Practical lab course during his Master's*
Technologies: C++, CMake, Eigen, Ceres

EDUCATION

Robotics, Cognition, Intelligence - M.Sc., *Technical University Munich (TUM)* — 2018 Oct – 2021 Mar, Munich, Germany
- Focus areas: Machine Learning, Deep Learning, Computer Vision
- Master's thesis: *Bundle Adjustment for 3D Multi-Object Tracking*

Engineering Sciences - B.Sc., *Technical University Munich (TUM)* — 2014 Oct – 2018 Aug, Munich, Germany
- Focus area: Computer Science
- Bachelor's thesis: *Locomotion of snake-like robot via spiking neural nets*