

LUC MCCUTCHEON

RESEARCH ENGINEER · VLA POST-TRAINING

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lucmccutcheon.home@gmail.com | [GitHub](#) | [LinkedIn](#) | [Google Scholar](#) Research Engineer and PhD Candidate (completing Summer 2026) specialising in RL for distributed VLA post-training. Co-Founder/CTO of GeoSnap. Expert in JAX/PyTorch. Published at ICRA, NeurIPS, and IROS.

RESEARCH SCIENTIST (FIXED-TERM)

Cambridge Consultants — Oct 2025 – Mar 2026

- Developed reinforcement learning pipelines for the Unitree G1 humanoid robot
- Fine-tuned Vision-Language-Action models (GR00T) for manipulation tasks
- Built simulation environments in MuJoCo and NVIDIA Isaac Sim
- Designed and executed sim-to-real transfer experiments
- Demonstrated VLA manipulation work at Mobile World Congress (MWC) 2026

LEAD RESEARCH SCIENTIST (PART-TIME)

Agile Loop — Oct 2023 – Apr 2025

- Led a team of 10 researchers across multiple agentic AI projects
- Developed agentic pipelines combining RL and VLM LoRA fine-tuning
- Presented technical results and product demos to Google Cloud stakeholders

RESEARCH SCIENTIST (PART-TIME)

Agile Loop — Jun 2023 – Oct 2023

- Built RL environments for software testing and evaluation
- Developed computer vision systems for product applications
- Designed hybrid edge/cloud computer vision and reinforcement learning model routing architecture for Lenovo
- Conducted in-context learning research using custom environments

ASSISTANT RESEARCH VOLUNTEER

Connected & Autonomous Vehicle Lab — Jun 2022 – Aug 2022

- Implemented Noisy Neural Networks and Deep Q-Learning for autonomous driving
- Tackled partial observability using LSTMs

SOFTWARE ENGINEER INTERN

QinetiQ — Jul 2018–Sep 2018 & Jul 2019–Sep 2019

- Developed voice cryptography systems in C++ and Python
- Conducted red team security assessments and penetration testing

PHD REINFORCEMENT LEARNING (SPONSORED)

University of Surrey — 2021 – 2026 (expected)

Research focus: world models, Neural Lyapunov functions for stability, time-delay control systems, and large-scale JAX implementations. Published at top robotics and ML venues, supervised by S. Fallah.

BSC COMPUTER SCIENCE (HONS) — FIRST CLASS

University of Surrey — 2018 – 2021

CyberFirst Scholarship recipient. Strong foundation in algorithms, systems, and applied machine learning.

Frameworks & Libraries: JAX, PyTorch, Gymnasium, vLLM, NumPy

Languages: Python, C++, Rust, JavaScript

RL & ML: PPO, GRPO, LoRA, VLA, SAC, RAINBOW, ResNet
Infrastructure & Tools: Unitree G1, SLURM, GCP, AWS, Docker
Languages (Human): French (C1)

First Author

- **Neural Lyapunov Function Approximation with Self-Supervised Reinforcement Learning** — ICRA 2025
- **Adaptive PD Control using Deep Reinforcement Learning for Local-Remote Teleoperation with Stochastic Time Delays** — IROS 2023
- **Preventing Policy Collapse in Continual Reinforcement Learning** — Under Review

Co-Author

- **Meta-World+: An Improved, Standardized, RL Benchmark** — ICML 2025 Workshop (Spotlight) & NeurIPS 2025
- **In-Context Ensemble Learning from Pseudo Labels Improves Video-Language Models for Low-Level Workflow Understanding** — NeurIPS 2024 Workshop
- **Prediction Based Decision Making for Autonomous Highway Driving** — ITSC 2022

Reviewing

ICLR 2026 | NeurIPS 2025 | TNNLS 2025 | IROS 2025

- Honourable Mention — Grokathon 2026
- Bronze Medal — Mathematics & Informatics Olympiad
- Grace Hopper Award — University of Surrey
- Foundership Award
- NVIDIA Deep Learning Certificate
- Coursera Reinforcement Learning Specialisation
- Extended Project Qualification (EPQ)
- **Google Agents Workshop** — Guest speaker and panel discussion on agentic AI
- **University of Surrey** — Model-based Reinforcement Learning; JAX vs PyTorch
- **Cambridge Consultants** — Model Optimisation & Compilers; Safe Reinforcement Learning