# LISA ALAZRAKI

lisa.alazraki20@imperial.ac.uk • Website • Scholar • GitHub • Linkedin • EU Citizen, UK Settled Status

PhD student in the NLP Group at Imperial College London. Research interests: LLM reasoning and planning, agents, model robustness.

#### **EDUCATION**

Imperial College London, PhD Computing	Supervisor: Marek Rei	2027
Imperial College London, MSc Computing (AI and Machine Learning)	Classification: Distinction	2021
<b>The Open University</b> , Grad. Cert. Theoretical Statistics and Probability	Classification: Distinction	2020
<b>The Open University</b> , BSc (Hons) Computing & IT and Mathematics	Classification: 1st Class	2019

Scholarships and awards: Imperial Computing Conference 2024 Poster Competition First Prize • IET Research Awards 2024 – Postgraduate Prize Alan Turing Institute Enrichment Placement Award 2024/25 • Sir Richard Stapley Trust Annual Grant 2024 • Imperial College Trust Grant 2023 IET Travel Award 2023 for International Travel • Sir Richard Stapley Trust Annual Grant 2023 • IEEE CogMI 2022 Best Student Paper Award EPSRC Doctoral Scholarship 2022 • Imperial College London Distinguished MSc Dissertation Award 2021 • DeepMind MSc Scholarship 2020/21 Open University Official Commendation from the Faculty of Maths, Computing and Technology 2017 • Leslie Walshaw Award 2016 in Mathematics

#### **EXPERIENCE**

## **Meta**, Research Scientist Intern • London, UK

Jun - Nov 2025

Manager: Akhil Mathur. Team: Llama Reasoning and Planning.

## Cohere, Research Intern · London, UK

Jun - Dec 2024

- Manager: Max Bartolo. Team: Command Post-training.
- Developed a reinforcement learning pipeline for reverse engineering human preferences that boosts LLM-as-a-judge evaluation.
- · Investigated implicit learning from mistakes, showing LLMs attain higher accuracy when not shown explicit corrective feedback.
- Completed two distinct research projects at the same time, both resulting in first-author papers.

# **Google**, *Research Intern* ⋅ Amsterdam, Netherlands

Jun - Sep 2023

- Manager: Thomas Mensink. Team: Perception.
- Developed a model-ensembling framework for knowledge-intensive VQA that beats SOTA by 5% on Encyclopedic-VQA.
- Presented the resulting publication at ICBINB at NeurIPS 2023.

# **Google**, Student Researcher • London, UK Research Intern • Zurich, Switzerland

Oct - Dec 2022

Jun - Sep 2022

- Manager: Hamza Harkous. Team: Applied Privacy Research.
- Developed a new pipeline for retrieval-augmented generation of user issues that was deployed to production.
- Improved recall of existing issues by 10x over the previous model, with comparable semantic accuracy for new issue generation.
- Granted a global patent as co-inventor of the overall system for navigating user feedback.

## SELECTED PAPERS

AgentCoMa: A Compositional Benchmark Mixing Commonsense and Mathematical Reasoning in Real-World Scenarios, <i>In review</i> <u>Lisa Alazraki</u> , Lihu Chen, Ana Brassard, Joe Stacey, Hossein A. Rahmani, Marek Rei	2025
How to Improve the Robustness of Closed-Source Models on NLI, <i>In review</i> Joe Stacey, <u>Lisa Alazraki</u> , Aran Ubhi, Beyza Ermis, Aaron Mueller, Marek Rei	2025
Reverse Engineering Human Preferences with Reinforcement Learning, NeurIPS 2025 (Spotlight) <u>Lisa Alazraki</u> , Yi Chern Tan, Jon Ander Campos, Maximilian Mozes, Marek Rei, Max Bartolo	2025
No Need for Explanations: LLMs Can Implicitly Learn from Mistakes In-context, EMNLP 2025 (Oral) <u>Lisa Alazraki</u> , Maximilian Mozes, Jon Ander Campos, Yi Chern Tan, Marek Rei, Max Bartolo	2025
<b>Enhancing LLM Robustness to Perturbed Instructions: An Empirical Study</b> , <i>ICLR 2025 BuildingTrust</i> Aryan Agrawal*, <u>Lisa Alazraki</u> *, Shahin Honarvar, Marek Rei (*Equal contribution)	2025
<b>How can representation dimension dominate structurally pruned LLMs?</b> , <i>ICLR 2025 SLLM</i> Mingue Xu, <u>Lisa Alazraki</u> , Danilo Mandic	2025
Meta-reasoning Improves Tool Use in Large Language Models, NAACL 2025 Findings <u>Lisa Alazraki</u> , Marek Rei	2024
How (not) to ensemble LVLMs for VQA, NeurIPS 2023 ICBINB <u>Lisa Alazraki</u> , Lluis Castrejon, Mostafa Dehghani, Fantine Huot, Jasper Uijlings, Thomas Mensink	2023

#### SKILLS\_

Programming languages Libraries / frameworks Python, TypeScript, JavaScript, Java, Lua, MATLAB/Octave, Maxima, Solidity, Prolog, Unix/Bash, HTML, CSS PyTorch, TensorFlow, Keras, NumPy, Pandas, Scikit-learn, Transformers, NLTK, Jinja2, Matplotlib, React, Flask