

gavin leech

AI researcher / technical generalist

g@gleech.org
Site
Scholar
Twitter
Github
LinkedIn

background

machine learning,
computer science,
epidemiology,
consulting,
psychology,
philosophy.

interests

judgment,
getting into things,
metascience,
failures of reasoning,
failures of reasoning
about reasoning,
lists.

experience

2021 – Now	Founder	ARB RESEARCH
	Researching AI, forecasting, metascience, and cause prioritisation for Schmidt Futures, Open Philanthropy, Future of Humanity Institute, Mercatus.	
2022	Interim Director	ALERT
	Setup & executive search, 'Active Longtermist Emergency Response Team'.	
2021 – Now	Head of Camp	EUROPEAN SUMMER PROGRAM ON RATIONALITY
	Running experiential maths camps: hiring, curriculum design, teaching. Classes on research skills, speculative astronomy & cultural literacy.	
2020 – 2021	Researcher	EPIDEMICFORECASTING.ORG
	Modelled Covid, resulting in work in Science, NeurIPS, PNAS. Led a major epidemiological study of facemasks from data collection to journal review.	
	> PyMC3, MRP (hierarchical Bayes), SEIR, AWS, Azure, Seaborn	
2019 – 2021	Teaching Assistant	UNIVERSITY OF BRISTOL
	Solo instructor in CS tutorials & training other TAs. Bayesian ML & Algos 2.	
	> Gaussian processes, graphical models, Bayes opt, VI, graph theory	
2018 – 2022	Technical Reviewer	AI SAFETY CAMP
	Vetting & interviewing for the world's ~1 st intro programme to safety research.	
2016 – 2019	Data Scientist	AXA INSURANCE
	Actuarial pricing, image recognition, tooling, etc. Tech lead for a team of 5.	
	> Python, Spark, Tensorflow, Keras, XGBoost, Tableau, bash, Pig, GDPR	
2015	Software Developer	STUGO
	Jumped into web dev; code deployed worldwide within weeks. 3rd employee.	
	> C#, WPF, nodeJS, MEAN, Ractive, Mongo, Vagrant, VMware	

awards

- Emergent Ventures grant for general career support
- Prague Fall Season fellow; Mexico EA fellow.
- Top prize @ AMoC NLP hackathon, run with the Dutch Serious Crime Unit.
- EA Forum Prizes for models of AI safety and government responses to Covid.
- UK Research Innovation Studentship (PhD funding, ~\$150k)

publications

- Mass mask wearing reduces Covid transmission (2022), [PNAS](#)
- Safety Properties of Inductive Logic Programming (2021), [SafeAI @ AAI](#)
- Reversals in Psychology (2021), [Nature blog](#)
- Nonpharmaceutical interventions against Covid (2020), [Science](#)
- How robust are Covid estimates? (2020), [spotlight @ NeurIPS](#)

projects

[RL side effects](#)

[ProlexaPlus](#)

[The First Computers](#)

[‘Off Road’](#)

judgment

Brier score = [0.16](#),

[Criticism Contest](#),

[Of books](#), [of value](#),

[Consistency](#)

education

PhD Artificial Intelligence, University of Bristol. 2024 finish. First year: research Master’s. Second: Covid modelling projects. Third: work in ML safety. Fully funded by the EPSRC.

> [probability](#), [Bayes](#), [deep learning](#), [computational logic](#), [SVMs](#), [RL](#).

MSc Software Development, University of Glasgow. 82% GPA. Thesis: *Hidden Markov Models for Linguistic Accommodation*

> [Assembly](#), [Java](#), [SQL](#), [web dev](#), [design patterns](#), [algos](#).

BSc Mathematics & Statistics, The Open University. 89% GPA (First). Part time alongside full-time work. Reviewed [here](#). Covered number theory, probability theory, advanced regression, optimisation, numerical analysis, linear algebra, clinical statistics.