Gabor Hollbeck

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Gabor Hollbeck is a physics graduate researcher interested in computational social science,

AI4Democracy applications and AI safety research.

Education

M.Sc. Physics, ETH Zürich	Focusing on complex system dynamics	Sept 2022 – Present
Visiting Undergraduate Student , ETH Zürich	Sept 2021 – Feb 2022
B.Sc. Physics, Universität Duisburg-Essen, ranked first in cohort	Sept 2019 – Sept 2022

Experience

Student Researcher, Comparative Global Humanities Initiative @MIT with Prof. Wiebke Denecke and Prof. Otto Scharmer	Jan 2025 – Present
Student Researcher, Computational Social Science Group, Prof. Dirk Helbing	Feb 2024 – Present
• Complex system optimization via genetic algorithms	
Student Assistant, Institute for Machine Learning @ETH Zürich	Nov 2023 – Apr 2024
Student Researcher, Rahman-spectroscopy on graphen, Prof. Marika Schleberger	Sept 2020 – Mar 2021

Publications

Cannot or Should Not? Automatic Analysis of Refusal Composition in IFT/RLHF Datasets and Refusal Behavior of Black-Box LLMs, NeurIPS (2024)	2024
Congestions and Spectral Transitions in Time-Lagged Correlations of Motorway Traffic. Physica A: Statistical Mechanics and Its Applications, vol. 649, 2024	2024

Coding Projects & Initiatives

Diplomatica.ai – Duolingo for Conflict resolution, Emotional Intelligence, AI Conversation Simulator that gives feedback on communications skills	2024 – Present
Founder, Electomate – Conversational Election Tool	2024 – Present
• Recruiting and leading a team of 20+ people	
Co-Founder, The ETH Zürich Alt Protein Project	Nov 2023 – Present
• Think tank and part of of Alt Protein Projects, funded by the GFI (Good Food Institute), fostering the transformation of the way we produce food sustainably.	
• Recruiting and leading a team of 10+ people.	
Youtube Content Creator, Polylog (YouTube Channel on theoretical CS)	2024 – Present

Skills & Interests

Languages: German and Hungarian (native speaker), English (C2), French (B1)

Software/coding: Python (5+y), Julia (1 semester), React (1y), MATLAB (1 semester), Mathematica (2y), Adobe

Interests: Social Entrepreneurship, AI4Good, Complex System Dynamics, Climate Change, Mindfulness

Awards and Scholarships

Winner of Politechathon Berlin 2024 |1st Place, National Photography Competition of Deutsche Stiftung Denkmalschutz (3000+ participants) | 1st Place in 3Blue1Brown Competition "Summer of Math exposition" | Scholar of the federal merit-based "Deutschland Stipendium"