Stefan Schöpf

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EDUCATION

University of Cambridge
Cambridge, UK

PhD in Engineering (UKRI EPSRC DTP funded)
Oct. 2022 – Present

- Machine Unlearning: Removal of copyrighted, erroneous, outdated, or poisoned data from already trained models
- Winner of the "Future of Search" category and "Most Beneficial through Human Hours Saved" quest by Anthropic at the AI Engine Hackathon with 200+ participants from Oxbridge, Imperial and UCL; Demo: Agentic Search Analytics Platform
- Thesis (co-)supervision: Agentic LLMs in Supply Chains; Learning to Forget using Hypernetworks (NeurIPS'24 workshop)

ETH Zürich
Zürich, CH

MSc in Management, Technology, and Economics
Sep. 2019 – Oct. 2021

- Won the semester-long Marketing Analytics prediction competition (data from a Swiss FI; offered fast track recruitment)
- 6-month thesis on RL for combinatorial optimization at Cambridge for the combined problem of vehicle routing and 3D-bin packing using a transformer model to overcome the scaling problems of traditional solvers (IJCAI workshop paper)

Graz University of Technology
Graz, AT

BSc in Mechanical Engineering and Business Economics
Sep. 2015 – Dec. 2018

- Circle of Excellence 2018 (one-year program for ~ 20 students per year from all universities in Graz; 50.000+ students)

EXPERIENCE

Google DeepMind
London, UK

Student Researcher
Dec. 2024 – Present

IBM Research
Dublin, IE

Research Intern; AI Security & Privacy Team
Jun. 2024 – Sep. 2024

- Best presentation award at the IBM Research international intern presentation day (UKI) for my work on Automated LLM Red Teaming with agentic LLMs (Retrieval of strategies, structured outputs, LLM as a judge, etc.)

Boston Consulting Group
Zürich, CH

Associate; Technology & Digital in Insurance and Private Equity
Nov. 2021 – Sep. 2022

- CVDD of a cybersecurity asset (market modelling, etc.)
- Led the creation of a digital maturity assessment framework for a leading financial institution at process step granularity level to estimate savings potential, acting as the decision basis for a multi-year XXXM digital transformation
- Part of the SAP x BCG "tech-enabled sustainability transformation" Moonshot PMO team

Audili (European Space Agency Business Incubator)
Graz, AT

Co-Founder; Scalable high-resolution soil type prediction via spectral satellite imagery
Dec. 2018 – Apr. 2021

- Award winner at Copernicus Masters, Europe's largest earth observation competition by ESA (€5k + BayWa mentoring)
- Led the machine learning model development (Kedro framework, MlFlow, AWS, etc.)
- Drafted business plans/pitches for the ESA BIC, Copernicus Accelerator, Clinton Global Initiative University, and Parsec 100 (Horizon 2020), totalling over €60.000 equity-free funding

Relevant Pre-PhD Internships/Projects

I have demonstrated technical product management and team leadership experience throughout my studies

- **OMV (Austria's national oil and gas company):** Led a team of 5 for 9 months to design an IoT pipeline solution estimated by OMV to create 75% savings in monitoring interventions; reported directly to the upstream technology manager
- **Mercedes-Benz Future Transportation:** Created a modular go-to-market strategy framework and drafted the data monetization part of the business model for the first OSS project at Mercedes-Benz

SELECTED PUBLICATIONS *INDICATES EQUAL CONTRIBUTION (Alphabetical order)

- **Schöpf S.**, Foster J. & Brintrup A. (2024), Potion: Towards Poison Unlearning. ***Journal of Data-Centric Machine Learning Research** (DMLR, part of the JMLR family)*
- Foster J.***, Schöpf S.*** & Brintrup A. (2024), Fast Machine Unlearning Without Retraining Through Selective Synaptic Dampening. ***AAAI 2024***
- Foster J.***, Schöpf S.*** & Brintrup A. (2024), Loss-free Machine Unlearning. ***ICLR 2024 Tiny Papers***
- **Schöpf S.**, Foster J. & Brintrup A. (2024), Parameter-tuning-free data entry error unlearning with adaptive selective synaptic dampening. ***Preprint***
- Rawat A., **Schöpf S.**, Zizzo G, Cornacchia G., Hameed M.Z., Fraser K., Miehling E., Buesser B., Daly E.M., Purcell M., Sattigeri P., Chen P.Y., Varshney K.R. (2024), Attack Atlas: A Practitioner's Perspective on Challenges and Pitfalls in Red Teaming GenAI. ***NeurIPS 2024 Red Teaming GenAI Workshop***

ADDITIONAL QUALIFICATIONS

Languages: German (native), English (fluent)
Tools: Weights and Biases, Docker, MlFlow, Tensorboard, Figma, InVision Studio, Tableau, ...
Hobbies: Pole vaulting (Cambridge University Athletics Club), downhill unicycling, diving, bouldering, cross-country skiing