JACKSON HARMON

Machine Learning Scientist

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PROFILE

I'm a master's student studying at the University of Tübingen, interested in developing the next generation of machine learning models. My research focuses on understanding continual learning and how post-training processes affect pretrained knowledge in large language models.

EDUCATION

University of Tübingen

Tübingen, Germany

Master of Science in Machine Learning Georgia Institute of Technology 2023 - Present Atlanta, GA

Bachelor of Science in Computer Science, Highest Honors

2017 - 2021

• Specializations: Machine Learning and Theory

2011 202

Ludwig Maximilian University of Munich

Munich, Germany

 $Study\ Abroad\ -\ Informatik$

2019 - 2020

RESEARCH & PUBLICATIONS

Mapping Post-Training Forgetting in Language Models at Scale

2025

- Research quantifying how post-training alters pretrained knowledge in LMs through sample-wise forgetting metrics
- Demonstrated that domain-continual pretraining induces moderate forgetting
- Showed RL/SFT yields moderate-to-large backward transfer on math and logic tasks
- Found that model merging doesn't reliably mitigate forgetting
- Project website: post-forget.github.io

EXPERIENCE

Software Engineer 2021 – 2023

NCR Corporation

Atlanta, GA

- Code-owner of Java and Go microservices deployed across companies worldwide
- Led inter-team and customer-facing weekly meetings to coordinate feature development
- Implemented scalable production backend services

Machine Learning Intern

2018

Hawque

Atlanta, GA (Remote)

- Developed a facial recognition system with a remote international team
- Implemented user-item collaborative filtering to match users and providers based on preferences and history
- Presented and demonstrated results to stakeholders

Engineering Intern

2016

 $Perceptive\ Solutions$

Greenville, SC

- Developed a framework for modeling interactions between various magnets
- Wrote a data extrapolation and visualization program compatible with the modeling framework

Selected Projects

ML Models & Algorithms Implementation | Python, NumPy, PyTorch

2024

- On-going collection of machine learning models and algorithms implemented from scratch for learning
- Includes neural networks, optimization algorithms, and probabilistic models

Physics-Informed Machine Learning | Python, PyTorch

2024

- Course project exploring physics-informed neural networks (PINNs)
- Applied PINNs to solving differential equations with physical constraints

Petri Dish Colony Counter | Python, TensorFlow, OpenCV

- Combined CNN with KMeans clustering and boosting to predict colony count on petri dishes
- Developed image generator and preprocessor for training data augmentation

HarmonsOS - Hobby Operating System | x86 Assembly, C

2013

- 16-bit to 32-bit operating system with bootloader, command line, and hard drive support
- Implemented memory management, file system, and interrupt handling from scratch

TECHNICAL SKILLS

Languages: Python, C++, Java, Go, CUDA, Bash, x86 Assembly, SQL, JavaScript

 \mathbf{ML}/\mathbf{AI} Frameworks: PyTorch, TensorFlow, NumPy, scikit-learn, Hugging Face Transformers

Tools & Platforms: Git, Emacs, Weights & Biases, Docker, Linux, AWS, LaTeX

Other Skills: German (B2 level)