NICK HENDERSON

College Park, MD ♦ (240) 604 - 4797 ♦ nickhenderson2024@gmail.com

Education

University of Maryland, College Park — **College Park, Maryland**
Bachelor of Science, Computer Science & Machine Learning, — December 2024
College Park Scholars Program — August 2020 – May 2022

- Two-year living-learning program for top 15% of undergraduates offering rigorous interdisciplinary curricula

Universitat Pompeu Fabra — **Barcelona, Spain**
Semester Abroad — January 2023 – May 2023

Relevant Coursework: Object-Oriented Programming I & II, Algorithms, Discrete Structures, Introduction to Computer Systems, Artificial Intelligence, Data Science, Machine Learning, Deep Learning, Natural Language Processing

Work Experience

T. Rowe Price – AI Labs — **Owings Mills, MD**
Junior Software Engineer — Starting April 2025
T. Rowe Price – Emerging Solutions — **Owings Mills, MD**
Software Engineer Intern — May 2024 – December 2024

- Partake in an Agile program development cycle with the Emerging Solutions Team, delivering innovative solutions for T. Rowe Price's customers and employees
- Contributed to the development of the LLM framework, an internal platform enabling T. Rowe employees to access external language models through a streamlined, secure, and developer-monitored environment.
- Improve Waysaver, an emergency savings application, by developing and optimizing features in TypeScript and JavaScript, enhancing user experience and application efficiency
- Spearhead a project to automate the resolution of NSF Alerts for Waysaver, developing two distinct solutions: a programmatic approach in TypeScript and an AI-Agent approach, powered by an LLM framework

Interclypse — **Annapolis Junction, MD**
Junior Full Stack Software Engineer — February 2024 – May 2024

- Built out full-stack services of Interclypse's software products for customers in the rental car industry, ensuring robust and scalable solutions
- Engaged in Agile projects, driving iterative development for efficient delivery and continuous improvement
- Programmed with tools like React, MongoDB, JavaScript, and Java to create seamless and effective applications

Research

Large Language Model AI Research — **College Park, Maryland**
Research Assistant — June 2023 – September 2023

- Collaborated with Professor Tianyi Zhou and PhD student Shwai He
- Implemented an exemplar optimization pipeline for in-context learning by training a white-box LLM to select exemplars to be used in few-shot prompting on black box LLMs
- Testing a range of white-box LLMs to find the best ranking system for demonstration selection
- Accessing LLMs on the UMD cluster, managing GPU, and experimenting with LLMs

Toolformer Research — **Barcelona, Spain**
Research Assistant — April 2023 – June 2023

- Worked with PhD student Roberto Dessi and Meta Research Scientist Pedro Matias on Meta-funded research
- Continued work exploring the use of Toolformer to give LLMs access to API tools
- Developed python APIs, produced a benchmark dataset, selected domains, and generated demonstrations

Skills

Technical Skills: Java, JUnit, C, Ruby, Ocaml, Rust, TypeScript, Python, Pandas, Git, SQL, PyTorch