

COLTON PEFFER

Detroit, MI • coltpeffer@gmail.com • (310) 741-9002 • [linkedin.com/in/coltonpeffer](https://www.linkedin.com/in/coltonpeffer) • cpeffer.github.io

EDUCATION 2020 – 2024	UNIVERSITY OF MICHIGAN College of Engineering Bachelor of Science in Computer Science, May 2024 <ul style="list-style-type: none">• Minors: Business Administration at Ross School of Business; Entrepreneurship• GPA: 3.86/4.00 Summa Cum Laude• Courses: Advanced Operating Systems, Web Systems, Human-Centered NLP Machine Learning, Machine Learning in Investing, Data Structures and Algorithm	Ann Arbor, MI
EXPERIENCE Sept 2024 – Present	Ford Motor Company Software Engineer <ul style="list-style-type: none">• Contributed to full-stack development of an e-commerce web application using React, TypeScript, and Spring Boot, contributing to over \$500M in sales with 13,000 Model E vehicles sold across North America after launch in 2024• Led API modernization efforts that automated daily tasks, resulting in an 80% reduction in the probability of rebilling, while also implementing dynamic Spanish language translation to expand application accessibility to 240 additional partners in Mexico• Demonstrated leadership and communication skills by leading team retrospectives to address burnout and developing a rotational program for new hires, enhancing team integration and reducing overall team anxiety	Dearborn, MI
2023 Summer	Ford Motor Company Software Engineering Intern <ul style="list-style-type: none">• Addressed inefficiencies of using Excel for internal surveys by leading a team of interns to design and develop a full-stack web application MVP in a few months• Conducted user interviews and maintained weekly communication with product owners to gather feedback, resulting in a streamlined survey process that enhanced user experience	Dearborn, MI
2018 – 2023	Self Employed Private Tutor <ul style="list-style-type: none">• Delivered personalized tutoring to 15+ middle and high school students across subjects like AP Physics, AP Computer Science, and Mathematics, as well as SAT, ACT, HSPT, and ISEE prep, crafting tailored lesson plans that led to notable improvements in grades and test scores	Remote Work + Los Angeles, CA
PROJECTS	Machine Learning Moral Analysis Paper <ul style="list-style-type: none">• Coauthored a research paper investigating the ability of ML models to predict human morality based solely on textual data from the Reddit community r/AmitheAsshole using Python and Great Lakes High Performance Computing Cluster• Developed and implemented machine learning models, including logistic regression, random forest, and deep learning techniques such as BERT fine-tuning and Bidirectional GRU Networks, to classify posts, achieving high accuracy in predicting community judgments• Conducted feature engineering and selection using methods like Doc2Vec, LIWC, and PCA to identify significant linguistic patterns influencing moral judgment predictions Machine Learning for Predicting Abnormal Stock Returns <ul style="list-style-type: none">• Implemented advanced machine learning models, including LASSO regression, decision trees, random forest, and gradient boosting, to identify stocks with high positive abnormal returns relative to the S&P 1500 index• Analyzed feature importance and tuned hyperparameters through dataset splitting and out-of-sample testing to mitigate overfitting and enhance model robustness in stock return predictions	
TECHNOLOGIES	Python, PyTorch, Pandas, Sklearn, React, TypeScript, Kotlin, Spring Boot, GCP, C++	
ADDITIONAL	Avid soccer player and fan, a dedicated reader of mostly nonfiction, a chess enthusiast (around 1300 Elo), an intermediate guitarist, and a passionate cook	