Glenn Matlin

Ph.D. Computer Science, College of Computing, Georgia Institute of Technology — Atlanta, USA

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Education

05/2023 - Present | **Georgia Institute of Technology, School of Computer Science**
Ph.D. Candidate (GPA: 4.0/4.0)
Advised by Professor Mark Riedl, Director of Machine Learning Center, Human-Centered Artificial Intelligence Lab; College of Computing; Co-Advised by Professor Sudheer Chava, Alton M. Costley Chair Professor of Finance; Financial Services Innovation Lab, College of Business

08/2021 - 05/2023 | **Georgia Institute of Technology, School of Computer Science**
M.S. Computer Science (GPA: 4.0/4.0)
Coursework: Machine Learning, Deep Learning, Deep Learning with Text, Design of Algorithms and Data Structures, Systems for Machine Learning, Efficient Computing

2011 | **University of Central Florida, College of Business**
B.A. Economics
Coursework: Statistical Analysis, Quantitative Business Analysis, Research Methodology, Decision Sciences, Applied Game Theory, Industrial Organization, Finance Systems

Publications

1. *Do Language Models Agree with Human Perceptions of Suspense in Stories?*, **Matlin G.**, Zhang D., Loza R., Popescu D.M., Isbell J., Chakraborty C., Riedl M. 2nd Conference on Language Models (COLM) 2025 *(Top 3% paper; 28 % acceptance rate)*. https://arxiv.org/abs/2508.15794v1

2. *Financial Language Model Evaluation (FLaME)*, **Matlin G.**, Okamoto M., Pardawala H., Yang Y., Chava S., Findings of the Association for Computational Linguistics: ACL 2025. https://arxiv.org/abs/2506.15846

3. *Financial Instruction Following Evaluation (FIFE)*, **Matlin G.**, Siddharth, Anirudh JM, Shukla A., Hassan Y., Chava S., GenAI Finance Workshop at the Thirty-Ninth Annual Conference on Neural Information Processing Systems (NeurIPS) 2025. https://arxiv.org/abs/2512.08965

4. *Shall We Play a Game? Language Models for Open-ended Wargames*, **Matlin G.**, Mahajan P., Song I., Hao Y., Bard R., Topp S., Montoya E., Parwani M.R., Shetty S., Riedl M., Wordplay: When Language Meets Games Workshop at the 2025 Conference on Empirical Methods in Natural Language Processing (EMNLP) 2025. https://arxiv.org/abs/2509.17192

5. *FinForge: Semi-Synthetic Financial Benchmark Generation*, **Matlin G.**, Theerthala A., Gupta A., Anirudh JM, Castilla R., Ng Y.M., Chava S., Workshop on Agentic AI in Financial Services at the Fortieth AAAI Conference on Artificial Intelligence (AAAI) 2026. https://arxiv.org/abs/2601.06747

6. *Trust by Design: Skill Profiles for Transparent, Cost-Aware LLM Routing*, Okamoto M., Erol A.K., **Matlin G.**, MLSys 2025 Young Professionals Symposium https://arxiv.org/abs/2602.02386

7. *UnfoldML: Cost-Aware and Uncertainty-Based Dynamic 2D Prediction for Multi-Stage Classification*, Xu Y., Khare A., **Matlin G.**, Monish R., Zhang C., Tumanov A., 36th Annual Conference on Neural Information Processing Systems (NeurIPS) 2022 (25 % acceptance rate). https://arxiv.org/abs/2210.15056

Honors & Awards

2026 | **MATS Research Fellowship ($30,000)**, ML Alignment & Theory Scholars (MATS) Program

2026 | **Social Training Data Attribution ($10,000 compute credits)**, Modal Labs, Modal for Academics

2026 | **Financial Economics Reasoning Reinforcement ($5,000 compute credits)**, Thinking Machines Lab, Tinker Research Grant

2025 | **clAIrvoyant, AI+ Expo Hackathon 2025 ($15,000 prize money)**, OpenAI, Special Competitive Studies Project

2025	**Accelerate – 3,000,000 ACCESS Credits (~$100,000 compute credits)**, National Science Foundation (NSF), Advanced Cyberinfrastructure Coordination Ecosystem: Services & Support (ACCESS)
2025	**Financial Language Model Evaluation / FLaME ($6,000 compute credits)**, Together AI, Research Credits Program
2024	**MAGIC – Machine Assisted Global Intelligence Collection ($300,000 funding)**, Defense Advanced Research Project Agency (DARPA)
2024	**FiduciAIry – Mitigating Hallucinations in Financial Question Answering ($100,000 compute credits)**, Georgia Institute of Technology, Institute of Data Engineering and Science (IDEaS), Cyberinfrastructure Resources CFP
2023	**FinGT – Financial Generative Transformers (~$150,000 compute credits)**, Georgia Institute of Technology, Institute of Data Engineering and Science (IDEaS), Cyberinfrastructure Resources CFP 600,000 CPU hours on AMD Genoa Server, 36,000 hours of NVIDIA DGX H-100 GPU server usage, and 172 TB of secure storage
2023	**1st Prize, Ph.D. Research and Poster Competition**, School of Computer Science, Georgia Institute of Technology
2009 - 2011	**Dean's List Scholar (4 Semesters)**, University of Central Florida
2006	**Florida Academic Scholarship (20 % acceptance rate)** Recognizes exceptional academic achievement with a 100 % tuition award. Earned through outstanding GPA, SAT scores, and completion of 100 + service hours.

Research Experience

03/2026 - Present	**Berkeley Existential Risk Initiative (BERI)** *Research Assistant*
01/2026 - Present	**ML Alignment & Theory Scholars (MATS) Program** *Research Assistant*
07/2023 - Present	**Human-Centered Artificial Intelligence Lab** *Research Assistant*
05/2023 - Present	**Financial Services Innovation Lab** *Research Assistant*
05/2023 - 09/2023	**Lemurian Labs** *Research Intern*
06/2022 - 08/2022	**Children's Healthcare of Atlanta** *Research Intern*
01/2022 - 05/2023	**Systems for Artificial Intelligence Lab** *Research Assistant*

Teaching Experience

Spring 2026	**CS 7634 — Artificial Intelligence Storytelling in Virtual Worlds** *Spring 2026*
Fall 2025	**MGMT 8803 — Machine Learning for Finance** *Fall 2025*
Fall 2024	**MGMT 8803 — Artificial Intelligence for Finance** *Fall 2024*
Fall 2023 - Spring 2024	**CS 7641 — Machine Learning** *Fall 2023*

Spring 2023 - Summer 2023	**CS 6515 — Graduate Algorithms & Data Structures** *Spring 2023*
Fall 2022	**CS 8803 — Systems for Machine Learning** *Fall 2022*

Invited Talks

Fall 2025	**Graph-Based Retrieval Augmented Generation (GraphRAG)** *2nd Conference on Artificial Intelligence and the Future of Finance*
Spring 2025	**Financial Language Model Evaluation (FLaME)** *ML@GT Student Conference 2025*
Spring 2024	**Efficient Adaptation of Large Language Models for Domain-Specific Tasks** *1st Conference on Artificial Intelligence and the Future of Finance*
Fall 2023	**Theoretical Foundations of Natural Language Processing** *CS 7641 — Machine Learning, Georgia Tech*
Summer 2022	**Advanced Techniques for Deep Learning with Electronic Health Records** *Clinical and Patient Analytics, Children's Healthcare of Atlanta*
Fall 2021	**Deep Learning with Electronic Health Records** *CS 8803 — Systems for Machine Learning, Georgia Tech*

Skills

Software Engineering: Python, Rust, Go, PyTorch, TensorFlow, Scikit-learn, Pandas, SciPy, NumPy, Shell Scripting, Unit and Integration Testing, Continuous Integration & Deployment

Artificial Intelligence: Deep Learning, Generative AI, Neural Networks (Recurrent, Convolutional, Graph) Machine Learning (Trees, Regression, Embeddings, Clustering, Statistics & Probability)

Natural Language: Large Language Models (LLM), Generative Pre-trained Transformers (GPT), Bidirectional Encoder Representation from Transformers (BERT), HuggingFace, spaCy, Gensim, NLTK

Computer Engineering: Hardware Description Language (System Verilog), Test Benches (cocoTB), Power-Performance-Area Analysis, Tensor Processing Units, Systolic Arrays

Systems Engineering: Cloud Services (Amazon, Google, Azure), Cluster Computing (Spark, Kubernetes), Ray, Modin, Dask, MLFlow, Airflow, Parallelized & Distributed Computing

Analysis & Visualization: SQL/NoSQL, Excel, R, SAS, Tableau, SPSS, D3.js, Jupyter, Matplotlib, Plotly, Seaborn

Professional Experience

11/2020 - 07/2021	**Komodo Health — San Francisco, CA** *Senior Data Scientist, Machine Learning* Developed Machine Learning (ML) systems using clinical data to detect rare and undiagnosed diseases Designed greedy optimization algorithms to solve class imbalance problems with sparse data to engineer near-optimal datasets for ML, resulting in 4x effectiveness over previous manual process Managed a team of ML engineers focused on algorithm development, including junior mentorship Led complex cross-functional ML projects with pharmacological and clinical subject-matter experts
01/2019 - 05/2020	**Change Healthcare — Emeryville, CA** *Senior Data Scientist, Artificial Intelligence* Led end-to-end development of a Deep Learning (DL) based medical bill auditing system for scanning and analyzing > 100 M pages of paper clinical records, leading to significant reduction of waste, fraud, and abuse Built production and testable code for an enterprise Natural Language Processing (NLP) system capable of launching AWS pipelines to automate manual insurance claim auditing, generating \$400 K in cost savings Managed team developing platform for information extraction and clinical predictions using a large corpora of unstructured text to enable rapid and turn-key deployment of new models for business partners Onboarded and managed a remote team of five medical annotation specialists, labeling 360 K clinical records via programmed annotation tools to train DL models while saving \$200 K versus alternative option

01/2017 - 10/2018 | **LendUp — San Francisco, CA**
Data Scientist
Organized full development lifecycle of XGBoost and Logistic Regression models with Hyperopt for credit-card underwriting, responsible for ideation, testing, validation, deployment, and iterative improvements
Launched a new cross-functional team with Growth Marketing to develop ML platform using XGBoost
Developed new customer micro-targeting when predicting marketing responses, driving \$1.5 M in revenue
Rearchitected Operations Analytics Department including new user-experience features, rebuilding data pipelines, and providing new automated reporting capabilities while eliminating years of technical debt
Developed internal data-science career program, providing technical mentorship for 20 employees across the company and successfully placing four employees in data-analyst roles

05/2015 - 12/2016 | **RichRelevance — San Francisco, CA**
Senior Data Analyst
Led data analysis and custom performance reporting for a variety of key e-Commerce clients, including Costco, Patagonia, Under Armor, driving new revenue by deploying ML recommendation systems for clients
Spearheaded development of custom client-facing statistical reports by analyzing petabytes of unstructured Hadoop cluster logs to demonstrate lift in spending due to recommendation tools
Conducted multivariate ML experiments in order to optimize collaborative-filtering models

03/2014 - 04/2015 | **John Tyler Community College — Richmond, VA**
Research Analyst
Guided college administration with demographic analysis on new program design and institutional planning
Forecasted long-term demographic and economic profile of service area for institutional strategic planning
Consulted with advanced-manufacturing industry leadership on labor shortages and training gaps

08/2012 - 08/2013 | **Southeastern Institute of Research — Richmond, VA**
Research Analyst
Coordinated quantitative research and consulting with the Commonwealth of Virginia and Fortune 500s
Organized impact studies for state legislature to quantify transportation-construction return on investment
Audited waste from IT budget and migrated to Amazon Web Services, resulting in annual IT savings of \$75 K

01/2011 - 12/2011 | **Center for the Economic Analysis of Risk — Georgia State University**
Research Analyst
Conducted quantitative behavioral research on traffic patterns for the Federal Highway Administration
Analyzed experimental data gathered from both virtual-reality simulations and GPS sensors for vehicles

2002 - 2005 | **Self-Employed**
IT Systems Consultant
Graduated high school at 15 and started a personal business building IT solutions for local businesses
Created a remote virtual-desktop environment using thin-client laptops to enable agents complete mobility
Implemented "paperless office" solutions to eliminate overhead costs and provide text-search capability