Ediz Ertekin Jr.

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EDUCATION

University of California, Berkeley Dec 2024
B.A. Computer Science, Minor Data Science

- **Coursework:** Data Structures & Algorithms, Foundations of Data Science, Principles & Techniques of Data Science, Data Ethics, Discrete Mathematics and Probability, Efficient Algorithms, Optimization Models, Machine Learning, Computer Security, Operating Systems & System Programming, Computer Vision
- **Clubs:** Mobile Developers Of Berkeley (MDB), Neurotech @ Berkeley (NT@B)

PROFESSIONAL EXPERIENCE

Undergraduate ML Researcher, *Holistic AI* Apr 2024 – present | London, UK

- Conducted research on mitigating gender hiring biases in Large Language Models (LLMs) used for resume scoring
- Developed a benchmarking framework to evaluate gender biases like Level, Spread, Taste-based, and Statistical bias using anonymized resume data
- Implemented counterfactual metrics for hiring bias, such as Rank After Scoring (RAS), Impact Ratio, and Permutation Test-Based Metrics
- Analyzed data across 10 LLMs, identifying male biases in certain industries and created visualizations to highlight bias patterns, aiding interpretation

Software Engineering Intern, *Harness io* May 2024 – Aug 2024 | Mountain View, CA

- Designed a Harness marketplace MVP, creating a Command Line Interface (CLI) to streamline the generation of custom plugins,improving customer experience and workflow efficiency by 50%
- Built a data platform by implementing Apache Kafka for seamless connectivity between MongoDB and AlloyDB
- Leveraged PostgreSQL and SQLMesh for real-time data filtering, and deployed a Cube API semantic layer

Machine Learning Engineer, *Nexa Speech* Jan 2024 – May 2024 | Berkeley, CA

- Contributed to the development of a machine learning system for multi-agent conversations, leveraging Wisper, FastAPI, and ElevenLabs to build a robust speech-to-speech pipeline
- Fine-tuned agent interactions using RAG and prompt engineering based on user feedback
- Presented my work at the Data Science Discovery Program Symposium (https://tinyurl.com/4mztezvt)

Software Engineering Intern, *Snaplogic* May 2023 – Aug 2023 | San Mateo, CA

- Developed a new library for SnapGPT, an AI-powered platform for automating data integration pipelines across cloud data warehouses, leveraging NLP pratices and a RAG infrastructure
- Engineered a module to support premium integrations, enhancing the platform's capabilities for complex scenarios
- Developed algorithms for seamless data migration across cloud solutions, optimizing efficiency, and reliability
- Implemented tests for validation efforts to ensure accuracy and stability of integration pipelines, driving platform

PROJECTS

MNIST: CNN & Diffusion Model Nov 2024

- Employed a series of deep learning architectures for MNIST digit recognition, achieving > 97.5% accuracy on test set
- 98.7% test accuracy using CNN with U-Net architecture, max-pooling, batch normalization, and dropout for regularization

Facial Keypoint Detection Dec 2024

- Trained several deep Convolutional Neural Networks to predict human facial keypoints on unseen video and image data
- Regression-based model using ResNet architecture and classification-based model using U-Net architecture with heatmaps

PUBLICATIONS

JobFair: A Framework for Benchmarking Gender Hiring Bias in Large Language Models
(Co-author). EMNLP 2024 Findings Paper (https://arxiv.org/abs/2406.15484)

SAGED: A Holistic and Hand-Modulable Bias-Benchmarking Pipeline for Language Models
(Co-author). COLING 2025 Main Conference Paper (https://arxiv.org/abs/2409.11149)

SKILLS

Machine Learning: PyTorch, TensorFlow, OpenCV, CUDA, Weights & Biases, Scikit-learn, Pandas, Hugging Face

Languages & Tools: Python, Java, C, C++, Golang, Bash, SQL, Git, AWS, REST API, Docker, PostgreSQL, MongoDB