Aviv Gelfand

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Summary

- 1st year MSc candidate in Data Science (HUJI); Thesis: Dimensionality reduction of Deep Learning problem space through statistical methods and graph theory. BSc in Statistics and Data Science (HUJI; GPA 89).
- Dedicated to long-term growth in a cutting-edge company with a positive atmosphere; available for 80%-100% time role as a Data Scientist / ML or AI Researcher / Engineer / SW Dev.
- Demonstrated success in AI and software development through numerous roles and projects over the past 8 years, with a track record of implementing machine learning models to solve complex problems requiring strong collaboration and rapid self-learning skills, consistently delivering efficient and accurate models.

Experience

NLP Data Scientist / Research Assistant *Oct 2023 – May 2024*
Hebrew University of Jerusalem - Dr. Adi Leibovitch's Quantitative Legal Research lab

- Successfully executed Supervised-Fine-Tuning of large language models (frameworks: PyTorch, Transformers) to classify arguments in trials for a broader statistical legal research project; reduced labeling time and errors, replacing manual tagging with LLM-based tagging.
- Drove strategic alignment by delivering situational analyses and action plans to US-based stakeholders, effectively prioritizing objectives and focusing efforts to meet deadlines.
- Reached over 90% accuracy and 80% F1 scores in most target labels. Substantially reduced model complexity and training time using efficient sampling and overcoming significant imbalance. Corrected errors in the labeled data.
- Presented findings and achievements at a prominent statistics and data science conference in May 2024.

Statistics & Machine Learning Instructor *Oct 2022 – Sept 2023*
Upscale Analytics

- Built dozens of ML hands-on projects for a Machine Learning and Statistical Inference course, with constant feedback from a Senior Data Scientist (and head lecturer), Michael Winer. Instructed data analysts in tech through their first steps in statistical inference and classic machine learning using Scikit-Learn, SciPy, and XGBoost Libraries.
- Advanced from teaching assistant to instructor, then to a partner role. 3 successful semesters of weekly TA sessions with a significant presence of students.

Research & Development Assistant *Apr 2022 – Mar 2023*
Hebrew University of Jerusalem, Renana Peres's Computational Social Science Lab

- Self-taught and programmed smart-contracts with a C++-based programming language; developed simulations interface (React.js). Designed and analyzed experiments. Web-scraped data monthly. Did literature and academic peer reviews.

Data Analyst & Research Team Leader *Mar 2015 – Dec 2020*
Israel Defense Forces (Volunteered, Lieutenant)

- Conducted research, assessments, and analytics for high-ranked decision-makers and led the team's triplication of strategic products.
- Led cross-organizational projects, achieving several in-depth research papers with an unprecedented collaboration between research branches.

Education

The Hebrew University of Jerusalem *Oct 2023 – July 2026*
MSc in Data Science — LLMs-focused Thesis, guided by Prof. Ariel Jaffe.

The Hebrew University of Jerusalem *Oct 2021 – Aug 2024*
BSc in Statistics & Data Science (GPA 89)

Skills and Technologies

Scripting Languages and Tools: Python, Java, Solidity (C++ based), R, SQL, JS

Programming Libraries: Pandas, PyTorch, Transformers, SKlearn, LLM's SDK (OpenAI, Groq, etc) and more.

GenAI Tools: Prompt engineering (COT, etc), Crusur AI, Claude, ChatGPT, Perplexity, a 'Langtalks' fan

EDA & ETL: Basic and complex Visualizations, Statistical Inference and modeling, Cleaning, Encoding / Embedding

ML: Efficient Sampling, Feature Engineering, Parameters Optimization, Evaluation Metrics

CI/CD & Other: GIT, Linux, SLURM Cluster system, GitHub workflows, shell scripts, Big Query (proficient with SQL), Data-Bricks, Apache Spark