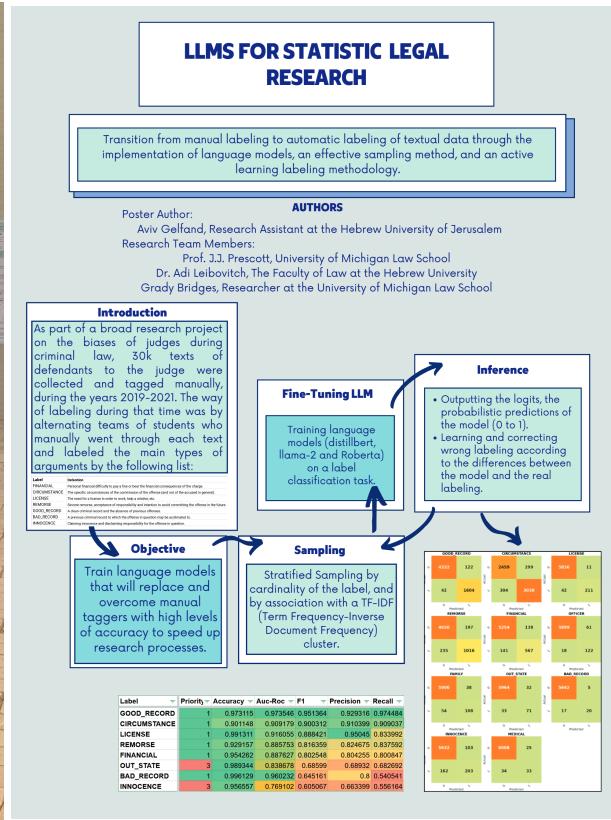
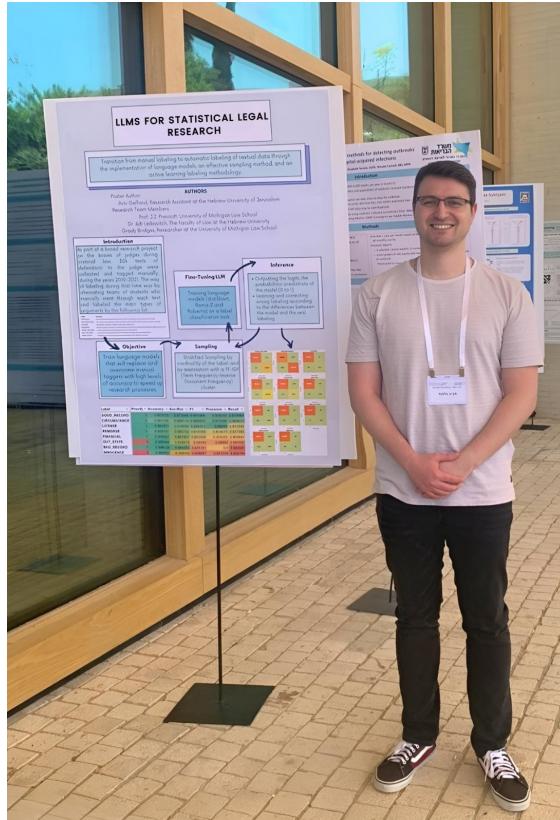


Check Out My Favorite Projects:

- **Fine-tuning Large Language Models** such as llama-2-7B, llama-2-7B-instruct, and some lighter models like RoBERTa, DistillBERT, and others for labeling texts in my role as NLP Data Scientist at HebrewU.



- **Driver Behavior Detection Using Smartphone Signals** - A Signal Detection project applying ML to identify risky driver behavior, based on academic publications and open source data-sets.

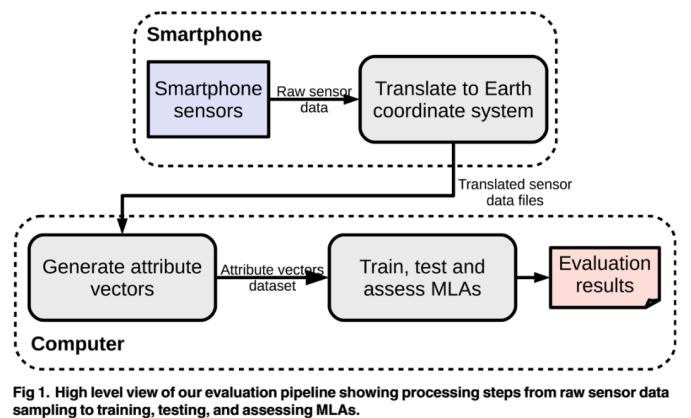
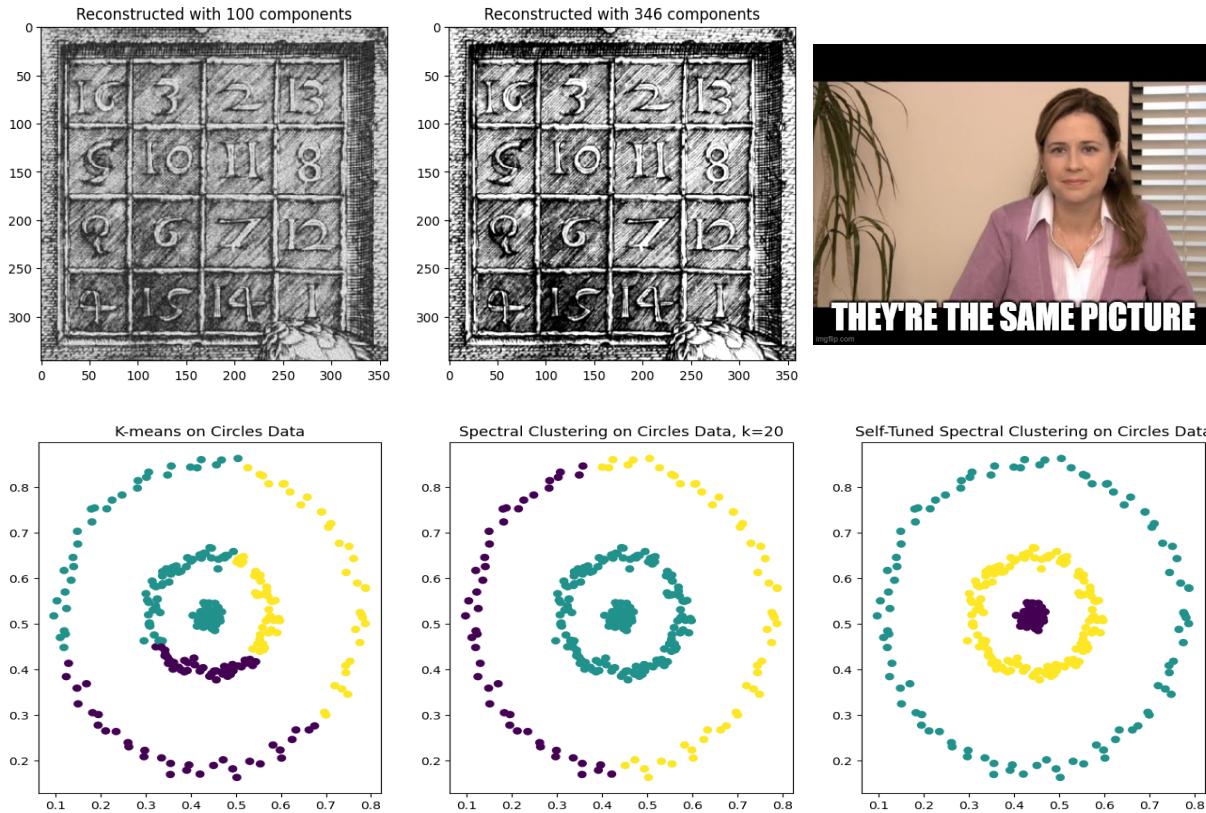


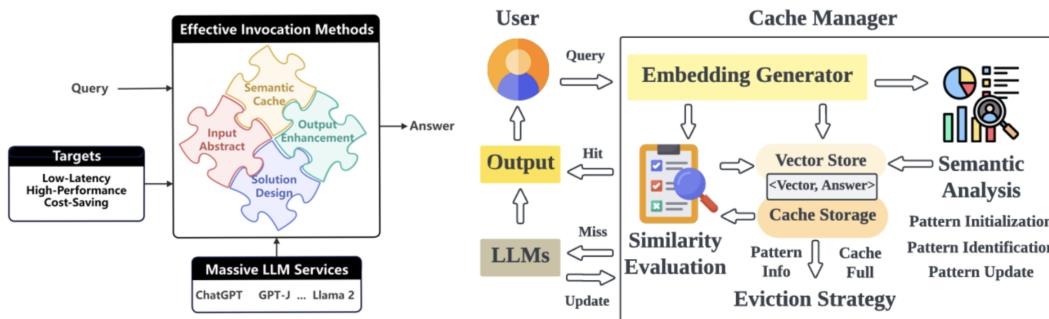
Fig 1. High level view of our evaluation pipeline showing processing steps from raw sensor data sampling to training, testing, and assessing MLAs.

<https://doi.org/10.1371/journal.pone.0174959.g001>

- **Geometry of Information Course Tasks** - covering kernel-based methods, spectral graph theory, clustering algorithms (K-means, Spectral), manifold learning, and graph signal processing.



- Semantic Caching for LLM-Based Applications - A small research project for a University course showcasing the effectiveness of caching in textual tasks involving language models.



- De Grandmizer Shtick! - A Generative AI HebrewU CS Hackathon project integrating Text-to-Text, Text-to-Speech and Computer Vision.



- Alfred👨‍💻, a Personal Assistant that **Scrapes and notifies on telegram** for new tasks on university moodle site. It also proved to be very useful when running scripts for a long time and wanting to get alerts and updates remotely.

Alfred MoodleBot July 2, 2023

52571 Regression and Statistical Models
Name: 'הנחת עבודה'
Scheduled for Tuesday, 18 July, 23:59.
Link: <https://moodle2.cs.huji.ac.il/nu22/mod/assign/view.php?id=404615&action=editsubmission>

Master Bruce, new update:
52324 Probability for Statistics students.
Name: '4 פורום תרגיל מתוחשב'
Scheduled for Saturday, 22 July, 23:59.
Link: <https://moodle2.cs.huji.ac.il/nu22/mod/forum/view.php?id=149158>

Master Bruce, new update:
52324 Probability for Statistics students.
Name: '4 בקורס סטטיסטיקות נכלק closes'
Scheduled for Saturday, 22 July, 23:59.
Link: <https://moodle2.cs.huji.ac.il/nu22/mod/quiz/view.php?id=149159>

Best

Alfred MoodleBot April 24

FAMILY model state_dict saved 14:41

FAMILY - Test - final_threshold: 0.61 FAMILY Test metrics:
(Accuracy: 0.9849180327868853, 'Roc_Auc': 0.8301336027843269, 'F1_score': 0.7012987012987013, 'Precision': 0.7397260273972602, 'Recall': 0.6666666666666666, 'Support': 162, 'TP': 108, 'FP': 38, 'TN': 5900, 'FN': 54)

FAMILY - Test

Actual Values	0	1
0	5900	38
1	54	108

Alfred MoodleBot April 25

FAMILY model state_dict saved 15:25

FAMILY - Test - final_threshold: 0.6 FAMILY Test metrics:
(Accuracy: 0.98, 'Roc_Auc': 0.781252255069396, 'F1_score': 0.6013071895424835, 'Precision': 0.6344827586206897, 'Recall': 0.5714285714285714, 'Support': 161, 'TP': 92, 'FP': 53, 'TN': 5886, 'FN': 69)

FAMILY - Test

Actual Values	0	1
0	5900	38
1	54	108



- [Predicting Song Popularity](#) using various Machine Learning Regression Models.
- [A Deeper Learning of Deep Learning](#) - trying to visualize and learn about how weights are being shaped.
- A project in [Textual Statistical Analysis, Sampling, and Statistical Inference](#) .
- Final Exam in Data Analysis with R course - [Analysis and visualization of earthquake geographical data](#).