#### YISHAI RASOWSKY

# Portfolio | Github | Linkedin | 054 751 6040 | yishairasowsky@gmail.com

I made aliyah from the United States 14 years ago. I have 2 years of work experience in ML and NLP. The main Python libraries I use are: Pandas, NumPy, and Scikit-learn for basic ML; Spacy, RegEx, Gensim, and NLTK for NLP; and Tensorflow or PyTorch for neural networks. I speak Hebrew fluently.

#### **SKILLS**

- Developing and deploying ML models
- Analystics, Pandas, Visualization
- NLP, Scikit-Learn, Tensorflow, PyTorch

- Agile, AWS, MongoDB, Django
- Industrious, organized, clean coding
- Learning new technologies quickly

### **WORK EXPERIENCE**

# Data Scientist (Independent contractor), Shamaym, 2021-22

- Created NLP topic models using Pandas and Scikit-Learn to classify debriefs; precision 95% and recall 50%.
- Developed NLP text generation using OpenAI API for auto-completion and text summarization.
- Built from scratch Python web app modules using Flask; deployed to production server using Linux.

### Data Scientist (Independent contractor), Streamline Verify, 2021-22

- Created and deployed NLP record linkage algorithm with Pandas and Scikit-Learn to deduplicate professional records of medical professionals, and achieved >95% completeness and homogeneity.
- Implemented resampling procedure using the bootstrap method and k-fold cross validation in order to optimally leverage a limited data set.
- Engaged in feature engineering and feature enrichment using Pandas and geocoder to enhance the business value of each insight to be gleaned from my data.

#### **INTERNSHIPS**

#### Data Scientist (Internship), Sefaria, 2020

- Created NLP multi-label classifier using Scikit-Learn to assign topic labels to text bilingual passages (ancient Hebrew and English), and achieved >95% precision, 36% recall. Designed specifically for high precision.
- Implemented hierarchical classification using a knowledge graph in order to enrich the insights gleaned from each parent topic and its children.
- Developed an end-to-end NLP pipeline using Pandas, Scikit-Learn, Scikit-MultiLearn, MatPlotLib, Seaborn, and Kubernetes in order to automatically provide the potential user with desired topic labels.

### Python Developer (Independent contractor), Smrt, 2019

- Created NLP entity extractor using rule-based logic for extraction of key entities from PDF office lease contracts, which achieved accuracy of >90% for several entities and boosted precision and recall by 20%.
- Developed interactive confusion matrix using mplcursors and to evaluate statistics of predictions.
- Created the end-toend AI portion of the product's web app using Pandas, Scikit-learn, SpaCy, Amazon Web Services, MatPlotLib, and Seaborn to enable fine-resolution entity identification.

# PERSONAL PROJECTS

- BERT Classification: Modules fine-tune BERT for SOTA NLP classification and named entity recognition (NER).
- Neural Network: Built from scratch without third party libraries. Displays superiority on non-linear dataset.
- Quantum Machine Learning: Coding and analysis of loss function for quantum circuits on iris classification.
- <u>Screen Capture</u>: Surveillance system that sends screenshots in real time via email and WhatsApp.
- Story Illustrator: PyPI package that produces slideshow with images and captions from user's input text.

# **EDUCATION**

# Honors BA Math and Physics, Amherst College, 2004-08

• Quantifying entanglement thesis; outstanding score on comprehensive math exam.

### Advanced Talmud, Ohr Somayach, 2008-16

Gemara with encyclopedic breadth and deep analysis; granted semicha.

# **CERTIFICATIONS**

# Data Science and Machine Learning Certificate, IBM, 2018

- Executed data-driven solutions to increase efficiency and accuracy.
- Created data regression models with visualization using predictive data modeling.

# **Programming Course, Udacity**, 2018

- Achieved proficiency in Python, Numpy, Pandas, and Github.
- Implemented knowledge acquired in SQL, HTML, CSS, Javascript.