

Experience

SparkBeyond, Netanya, Israel

2017-present

Director of Algorithmic AI

- Integrated algorithmic AI into roadmap by advising and collaborating with product and engineering leaders.
- Lead the design, product, and architecture for a novel product component. Successful rapid POC culminated in the creation of a designated product track, with a UX/UI, product and engineering team. Product is currently part of the core user flow in the platform.

Algorithmic AI Team Lead

- Managed team of six AI Research Engineers to define, implement and execute the algorithmic core of the automated data science platform while adhering to Agile methodology and CI and QA standards.

AI Research Engineer

- Developed and implemented machine learning algorithms to power an automated research engine.
- Led team of SW engineers, UX/UI designers, and AI researchers to create and deliver a moonshot product in [collaboration with XPRIZE](#). Successful POC culminated in development of a product currently licenced to external clients, generating revenue for SparkBeyond.

Senior Data Scientist

- Led client engagements, provided technical training and fostered mentorship relationships with McKinsey consultants as well as with external, large-scale clients in the telecom, retail, healthcare and finance domains.
- Built relationships with business stakeholders to plan and execute data science partnerships that lead to long-term licencing agreements for the SparkBeyond platform.

Winton Capital, San Francisco, CA

2016-2017

Data Scientist

- Engineered infrastructure to read and parse streams of data from Apache Kafka into Kudu using Spark.
- Integrated Jupyter notebooks with Apache Impala to provide simple access to rapidly changing distributed data for researchers in Zurich, London, and Oxford.

Helen Wills Neuroscience Institute, UC Berkeley

2010 – 2016

Graduate Student Researcher

- Recorded activity from surgically implanted electrodes on human brains. Implemented time series analyses, PCA, clustering, regularized regression and nonparametric statistics to link neuronal activity with behavior. Published in [Nature Human Behavior](#).
- Developed method for extracting oscillatory components from power spectra using regression, clustering, curve fitting and cross validation. Precision and recall match human performance. Published in [Nature Neuroscience](#).
- Supervised and mentored research assistants and graduate students. Taught experimental design, electrophysiology recording, signal processing and data analyses.

Projects

Data Science Fellow, Insight Data Science, Palo Alto, CA

2016

- Consulted for startup DeepGram to automatically segment unidentified speakers in recorded audio files.
- Engineered [unsupervised algorithm](#) combining spectral decomposition, PCA, and hierarchical clustering.
- Delivered code for use in existing predictive models and company proof of concept pitches.
- Presented as a talk at [Strata-Hadoop 2017](#) in San Jose, CA.

OkNLP

2016

- Combined NLP (tf-idf, tokenization) with machine learning (non-negative matrix factorization, hyperparameter tuning) to analyze free text and demographic information from online dating profiles.
- Presented as a talk at [SciPy 2016](#) in Austin, Texas and published in conference proceedings.

Military

Tank Instructor, Armored Corps, Israel Defense Force

2007 – 2009

Trained recruits, commanders and officers on the weapons control system of the Merkava Mark II tank.

Education

Ph.D., Neuroscience, UC Berkeley

2010 – 2016

National Science Foundation Graduate Research Fellow, Outstanding Graduate Student Instructor

B.A., Cognitive Science; Psychology, UC Berkeley

2003 – 2007

Highest Distinction in General Scholarship, Departmental Citation in Cognitive Science

Tools

Scala, git, Python, MATLAB, SQL, R, Lisp, Tableau, bash, HTML, Jira