

Aviv Bachan

CONTACT INFORMATION	912 Fruitedale Pl. San Jose, CA 617-838-1791	aviv.bachan@gmail.com avivbachan.weebly.com https://www.linkedin.com/in/aviv-bachan-45271924
SKILLS	<ul style="list-style-type: none">• Data Science with Python: Pandas, SKLearn, Keras, Numpy• Scientific computing with MATLAB: ode suite, curve fitting, optimization, statistics, parallel computing, and symbolic toolboxes.	
PROFESSIONAL EXPERIENCE	Data Scientist, Argyle Data, San Mateo	March 2017 – present
	<ul style="list-style-type: none">• General: using machine learning tools to detect fraud in mobile phone data and predict customer retention.• Refactored Argyle Data’s consortium of ML models into logical architecture with production-level code.• Spearheaded Argyle Data’s participation in a bid for detecting fraud for a major Latin-American mobile carrier. Used XGBoost and custom feature engineering to predict fraud on sample data provided by the customer.• Developed machine learning architecture to predict customer retention for a major European mobile carrier. Munged over 70Gb of customer payment data. Used embedding layers, time-distributed dense layers, and LSTM layers to perform sequence-to-sequence prediction.	
	Fellow at The Data Incubator, SF	Sep 2016 - Nov 2016
	<ul style="list-style-type: none">• TDI is a highly selective (4% admissions rate) data science bootcamp for Ph.D.’s looking to enter industry. Carried out multiple data science projects on topics such as social network analysis, time series modeling, distributed computing with Hadoop MapReduce & Spark.	
	Researcher & Instructor, Stanford University	March 2015 - March 2017
	<ul style="list-style-type: none">• Developed and applied inverse modeling methods (Kalman filter, particle filters, MCMC) for data assimilation in geochemical models. Results published in Science.• Taught a graduate-level course on mathematical and computational methods for Earth Scientists. Wrote accompanying textbook – see personal website: avivbachan.weebly.com.	
	Postdoctoral Scholar, Penn State University	Feb 2013 - Feb 2015
	<ul style="list-style-type: none">• Developed computational model for estimating the impacts changing oxygen levels in the atmosphere. Results published in PNAS.	
EDUCATION	Ph.D., Earth Sciences, Stanford University	Sep 2007 – April 2013
	Dual B.Sc. in Geological Sciences and Life Sciences, Ben Gurion University, Be’er Sheva, Israel	Sep 2004 – July 2007