Adam P. Jones

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meccaLeccaHi

Experienced data scientist proficient in the interpretation and visualization of data using Python, Matlab, and R. Proven ability to work either independently or as part of a team, and to communicate results in a precise, intuitive format to stakeholders of various technical backgrounds. Intent on applying these skills to data science problems, particularly those that involve machine learning.

Experience

03/2018-Present | Lead Instructor | General Assembly

- Instructor for data science training program focused on extracting information from large data sets, then using predictive modeling to foresee change.
- Instructor for Python training program that covering fundamental concepts and techniques, followed by the creation of a Python-powered application by each student.

06/2017-06/2018 | Lead Data Scientist | Critical Juncture

- Identified strategies, via academic literature review, for improving the accuracy of a medical record linkage system providing clinical performance metrics to more than 200 hospitals.
- Trained neural networks to match records across multiple SQL databases using 'fuzzy' matching, resulting in $\approx$75% reduction in non-matched records.
- Created convolutional neural network models to classify images (with $>$98% accuracy) embedded within the digital archives of the Federal Register, improving the readability and curatability of decades of government documents.

01/2016-05/2017 | Post-doctoral Researcher | Neurosurgery - U. of Iowa

- Implemented and maintained image/sound processing tools for realistic "morphing" of the identities of faces and voices, for use in human neurophysiological studies.
- Developed 'gamified' stimulus presentation platform, integrating feedback from joystick and eye-tracker devices, resulting in $\approx$25% greater participation by pediatric patients.
- Designed and deployed surveys via Amazon's Mechanical Turk API (reducing the cost of data collection dramatically), and visualized the results using dimensionality reduction.

10/2012-10/2015 | Pre-doctoral Research Fellow | National Institutes of Health

- Designed, deployed, and maintained a data processing pipeline for large volumes of electrophysiological data, which included dimensionality-reduction and clustering of neural events.
- Observed learning-induced changes in neural response properties using logistic regression and PCA.
- Presented results via invited lectures (3), posters (8), and written reports (3 journal articles).

Skills

Tools: Python (NumPy, pandas, Keras), R (dplyr, ggplot2, Rmarkdown), SQL, Jupyter, UNIX, Flask, LaTeX, Matlab, parallel processing (TensorFlow/Theano), distributed computing (cluster, AWS)

Analysis: multivariate analysis, hypothesis testing, Bayesian statistics, machine learning, neural networks, image processing, signal processing (spectral analysis)

Education

09/2009-12/2015	PhD (Neuroscience)	University of Maryland
09/2002-04/2007	BA (Biology/Psychology)	University of Montana