

Adam P. Jones

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in adam-p-jones
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

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|---|------------------------------|-------------------------------|
| 03/2018-Present | Data Science Instructor | General Assembly |
| <ul style="list-style-type: none">• Lead instructor for data science training program focused on extracting information from massive data sets, then using predictive modeling and pattern recognition to foresee change.• Developed and delivered weekly lectures on a wide variety of topics and mentored students of various technical backgrounds through individualized projects. | | |
| 06/2017-Present | Lead Data Scientist | Critical Juncture |
| <ul style="list-style-type: none">• 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 |
| <ul style="list-style-type: none">• 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 |
| <ul style="list-style-type: none">• 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, Docker, 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

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