Aaron C. Jones

DATA SCIENTIST

13930 Edgewater Drive, Norwalk, CA 90650

(562) 881-5206 | acjones1987@gmail.com | aaron-c-jones.github.io | aaron-c-jones

Experience

Blackwood Seven A/S
Los Angeles, CA

DATA SCIENTIST, MARKETING SCIENCES
Jan 2018 - present

- Continue constructing media mix models (see below)
- Research and develop an algorithm in Python that generates baseline models automatically using multiple machine learning methodologies, stacking, and block bootstrapping to enable faster client delivery and to minimize company overhead; collaborate with engineers to productize and deploy algorithm
- Design, in collaboration with the client services team, an improved reporting pipeline for weekly model results, reducing report preparation time by 75%
- Perform ad hoc analyses as needed, including building time series models
- Organize and lead seminars, for internal teams and clients, on topics ranging from modeling 101 to causal impact to learning types

ANALYST, MARKETING SCIENCES
May 2017 - Jan 2018

- Construct media mix models in the form of Bayesian hierarchical regression models to monitor media performance long-term by calculating costs per acquisition, KPI lift, and overall business decomposition, and to guide the allocation of tens of millions in media spend quarterly
- Build end-to-end baseline models using LASSO regression with bootstrapped uncertainty, regularly achieving sub-5% training and holdout MAPEs; one such model returned 11% statistically significant cumulative lift from a nine week national media campaign prompting the client to reinvest in offline media through Blackwood Seven
- Query, construct, and clean multiyear time series data sets using, among others, Redshift, MySQL, Quandl, and Google Trends

Southern California Coastal Water Research Project
Costa Mesa, CA

DATA ANALYST, DEPARTMENT OF BIOGEOCHEMISTRY
May 2016 - May 2017

- Contribute, as a named author, time series analyses, heat maps of the fluctuations in dissolved oxygen levels across the seasons, and basic summary statistics to a technical report quantifying the health of the San Elijo Lagoon in California; report prompted the initiation of a restoration project
- Clean and prepare numerous data sets of 100,000 plus rows for visualization and modeling using various data transformations, by unifying formatting and naming conventions, by standardizing units, and utilizing basic data imputation
- Build linear regression and random forest models, perform principal component and indicator species analysis, and create numerous visualizations for the organization's scientists to use in project proposals, scientific papers, and conference presentations

California State University Fullerton
Fullerton, CA

TEACHING ASSOCIATE, DEPARTMENT OF MATHEMATICS
Aug 2015 - Jan 2017

- Instructor of record for Introductory Probability and Statistics (1 term), and Intermediate Algebra (2 terms)

Consulting

Aquatic Bioassay and Consulting Laboratories
Ventura, CA

STATISTICAL CONSULTANT
May 2017 - present

- Facilitate the analysis of sparse environmental data by the nearest neighbor hot deck imputation of missing data
- Determine the major drivers of biological condition using variable importance measurements from random forest models built to predict quality indices from Los Angeles River and San Gabriel River Watershed Monitoring Program PHAB data
- Visualize high dimensional data using principal component analysis and non-metric multidimensional scaling

Black Swan Data
Lake Forest, CA

DATA SCIENCE CONSULTANT
Jan 2017 - May 2017

- Research, program in Python, and deliver an image processing algorithm, utilizing support vector machines, that identifies company names in social media images
- Algorithm trained on a 112,800 image dataset built using the open-source datasets Chars74K and CIFAR-10

Skills

Tools	Python, R, SQL, Amazon Web Services (Redshift, S3), scikit-learn, caret, Git, R Shiny, Jupyter, Tableau, LaTeX
Topics	Statistics, Machine Learning, Predictive Modeling, Programming, Visualization

Education

California State University Fullerton *Fullerton, CA*

M.S. IN STATISTICS *May 2017*
- Benson Scholarship for Graduate Mathematics Students (2016)
- Relevant courses: Statistical Computing, Categorical Data Analysis, Multivariate Analysis, and Time Series Analysis/Forecasting

M.A. IN MUSIC *May 2015*

University of California Santa Barbara *Santa Barbara, CA*

B.M. WITH HIGH HONORS IN MUSIC *Jun 2009*