

DEREK OWENS-OAS, Ph.D.

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GOAL	Find work as a data consultant, soccer coach, or sex positivity specialist.
CODING	<div><div>R (markdown, shiny, leaflet): advanced Python (conda, C(++), pandas): advanced LaTeX/Beamer: advanced Excel/Word/PowerPoint: advanced</div><div>Git(hub), Linux, MatLab: intermediate Java, HTML: intermediate SQL, Stata, MatLab: some experience Spark, Hadoop: some experience</div></div>
WORK EXPERIENCE	<p>DATA SCIENTIST, Xylem Inc. - water technology company (7/2018 - 4/2019) Agile software development; Coding on Amazon EC2 cloud instance in R Studio or in Python; 2-week sprints; <u>Git workflow</u>. Cleaned data; applied stats and machine learning; created reports. Dynamic linear model; Gaussian process; estimated water quality with sensors and satellite data. Visualized on map with app. Assessed water pipe network data quality at utilities. Random forest and generalized linear model forecasts.</p> <p>RESEARCH ASSISTANT, Duke University, Stats (1/2015 - 7/2015, 1/2017 - 8/2017) Responsibilities: Social Networks; Facebook, Reddit data APIs; ran and extended <u>machine learning</u> algorithms; web-scraped blog posts; regular expressions and processed <u>text data</u>; designed stats models (text in networks); parallel inference algorithm; evaluated, presented, and visualized results.</p> <p>TEACHING ASSISTANT, Duke University, Stats (8/2014 - 12/2014, 7/2015 - 12/2015, 8/2016 - 12/2016, 8/2017 - 12/2017, 1/2018-5/2018) Classes: Stats Programming, Bayes Methods & Modern Stats, Data Analysis & Stats Inference. Responsibilities: Led R programming labs, with parallelization, web scraping, big data; wrote exam questions; graded homework, labs, exams; held office hours; answered emails.</p>
GRADUATE EDUCATION	<p>DUKE UNIVERSITY, Durham, NC - - - GPA: 3.52. Ph.D., Statistical Science, May 2018 M.S., Statistical Science, May 2017 Courses: advanced machine learning, stats consulting, stats computation, social networks (audit), linear models, topic modeling, Bayes & modern stats, stats case studies, time series & dynamic models, stats inference, probability & stats models, measure theory, forecasting (audit).</p>
COLLEGE EDUCATION	<p>POMONA COLLEGE, Claremont, CA - - - GPA: 3.94 (<i>Magna Cum Laude</i>) B.A., Mathematics (Stats) major, Physics minor, May 2013 Courses: computer science, advanced computational stats, stats theory, differential equations & modeling, linear algebra, analysis, combinatorics, micro econ, macro econ, econ stats.</p>
PAPERS	<ul style="list-style-type: none">Henry, T., Banks, D., Owens-Oas, D., Chai, C. Modeling Community Structure and Topics in Dynamic Text Networks. <u>Journal of Classification</u>. October 2016.Zhang, W., Bu, F., Owens-Oas, D., Heller, K., Zhu, J.. Learning Root Source with Marked Multivariate Hawkes Processes. https://arxiv.org/pdf/1809.03648.pdf. arXiv. September 2018.
HONORS	<p>NBA hackathon (28% acceptance rate) (2017) Graduate <u>teaching assistant of the year</u> award winner (2017) and nominee (2018) Data expedition award (2014 and 2015) DataFest team winners best insight, visualization (UCLA 2013, Duke 2014) Phi Beta Kappa honor society (2013) Roland R. Tileston prize for <u>physics student of the year</u> at Pomona college (2010) Ashland high school <u>valedictorian (4.0 GPA)</u> (2005-2009)</p>
OTHER EXPERIENCE	<p>Duke Network Analysis Center. Head teaching assistant - lectures and multiple labs. Graduate student mentor in text mining and machine learning research groups. <u>Co-founder and treasurer of substance free events group</u>. Volunteer <u>panel leader at Hospitals and Institutions</u>.</p>