

Scott Clark scott@scottclark.io @DrScottClark		June 30, 2016 scottclark.io Not looking for new job opportunities
Education		
Cornell University <i>Ph.D. Applied Mathematics, M.S. Computer Science</i>		Ithaca, NY 2008 - 2012
<ul style="list-style-type: none"> • Department of Energy Computational Science Graduate Fellow (Full Scholarship, 4 years) • Machine Learning, Data Science, Data Mining in bioinformatics and global optimization 		
Oregon State University <i>B.Sc. Mathematics, B.Sc. Computational Physics, B.Sc. Physics</i>		Corvallis, OR 2004 - 2008
<ul style="list-style-type: none"> • Graduated Magna Cum Laude with minors in Actuarial Sciences and Mathematical Sciences 		
Research and Work Experience		
SigOpt Inc - https://sigopt.com <i>Co-founder and CEO</i>		San Francisco, CA November 2014 - current
<ul style="list-style-type: none"> • Helping lead a world class team to eliminate expensive trial and error from every experts workflow. Using cutting edge optimization behind a simple API to help tune machine learning models and build better products in a variety of fields. 		
Yelp Inc <i>Data Mining Engineer and Lead on Ad Targeting Team</i>		San Francisco, CA July 2012 - December 2014
<ul style="list-style-type: none"> • Optimization: Co-developed and led team for MOE: the Metric Optimization Engine (github.com/Yelp/MOE, an open source optimization framework), found significant gains in different metrics across the organization using Bayesian Global Optimization algorithms. • Targeting: Implemented multi-armed bandit strategies for ad selection, sole targeting engineer on mobile app ads rollout, developed new location-based targeting algorithms, advised and helped develop other machine learning and math based targeting projects. • Recruiting: Created, implemented, and directed yelp.com/dataset_challenge, gave tech talks across the country, led events, gave hundreds of technical interviews, closed candidates. 		
Bloomberg LP <i>Financial Software Development Intern</i>		New York, NY Summer 2011
<ul style="list-style-type: none"> • Implemented statistical models to perform forward and backward portfolio analysis 		
DOE Joint Genome Institute (Lawrence Berkeley National Lab) <i>Researcher in Analysis Group under Dr. Zhong Wang</i>		Walnut Creek, CA Summer 2010
<ul style="list-style-type: none"> • Used machine learning to mine TBs of genome data efficiently using novel likelihood function 		
Los Alamos National Laboratory <i>Researcher in Metagenomics Group under Dr. Nick Hengartner</i>		Los Alamos, NM Summer 2009
<ul style="list-style-type: none"> • Used statistical models to discover sequence alignments using parallel algorithms on GPUs 		
Oregon State University <i>Research Assistant under Prof. Malgorzata Peszynska and Prof. Rubin Landau</i>		Corvallis, OR 2005-2008

<ul style="list-style-type: none"> Finite element analysis with uncertainty and web-based teaching in Java 	
Max Plank Institute for the Physics of Complex Systems <i>NSF REU Research Assistant under Prof. Steven Tomsovic</i>	Dresden, Germany <i>Summer 2007</i>
<ul style="list-style-type: none"> Research on extreme value statistics in MATLAB and FORTRAN 	
University of California: Davis <i>NSF REU Research Assistant under Prof. Daniel Cox</i>	Davis, CA <i>Summer 2006</i>
<ul style="list-style-type: none"> Computational biophysics research as applied to protein folding in Java 	
Writing and Awards	
<ul style="list-style-type: none"> 2016 Forbes 30 Under 30: Enterprise Tech. http://onforb.es/10ILpBZ Department of Energy Computational Science Graduate Fellow: Four year full fellowship. ~20 awarded nationally per year. Won the Communicating Science award (bit.ly/VbcTZK). SigOpt Blog: Posts talking about using SigOpt to optimize everything (blog.sigopt.com). Yelp Blog: Wrote several posts announcing the open sourcing of MOE, the Yelp Dataset Challenge and more. bit.ly/1x73xdr, bit.ly/1oCCZvv, bit.ly/1s0sEBS, bit.ly/1p1X7Hk Press: WSJ: on.wsj.com/Va0vqQ, Cornell: bit.ly/1oB2dzm, DIEXIS: bit.ly/1oofb14 	
Skills	
<ul style="list-style-type: none"> Numerical Analysis and Computer Science: Machine Learning, Data Mining, Optimization, Computational Science, Artificial Intelligence, Linear Algebra, Monte Carlo Methods, ODEs, PDEs, Iterative Methods, Parallel Programming, Distributed Systems, Data Structures Tech Stack: Python, numerical libraries, linux, git, vim Public Speaking: I've given several hundred technical talks to audiences at machine learning conferences, Fortune 500 boards, and beyond. Exploring and implementing ideas. Give me an API/dataset and a problem and I will figure it out. 	
Selected Open Source Projects	
<ul style="list-style-type: none"> SigOpt Examples (github.com/sigopt/sigopt-examples) <i>Examples of using SigOpt to tune ML algorithms.</i> <ul style="list-style-type: none"> Examples of using SigOpt to tune everything from sklearn to beating Vegas and beyond. 	Python 2014 - current
MOE: Metric Optimization Engine (github.com/Yelp/MOE) <i>A global, black box optimization engine for real world metric optimization</i> <ul style="list-style-type: none"> Implemented throughout Yelp, optimizing ad metrics. 2nd most popular open source project. Talk: bit.ly/1p1YZA2, Slides: slidesha.re/1z0r0Jy, Blog: bit.ly/1x73xdr 	Python, C++, CUDA 2010 - 2015

- Presented to executives, universities, conferences and companies around the country.

- **ALE: Assembly Likelihood Estimator** (github.com/sc932/ALE) C, Python
Probabilistic evaluation of genome assemblies 2010 - 2013

- Uses statistical function to score and rank genome assemblies, published in Bioinformatics