

<b>Scott Clark</b> scott@scottclark.io @DrScottClark		<b>June 30, 2016</b> scottclark.io Not looking for new job opportunities
<b>Education</b>		
<ul style="list-style-type: none"> <li> <b>Cornell University</b>  <i>Ph.D. Applied Mathematics, M.S. Computer Science</i> </li> </ul>		Ithaca, NY 2008 - 2012
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Department of Energy Computational Science Graduate Fellow (Full Scholarship, 4 years)</li> <li>Machine Learning, Data Science, Data Mining in bioinformatics and global optimization</li> </ul> </li> </ul>		
<ul style="list-style-type: none"> <li> <b>Oregon State University</b>  <i>B.Sc. Mathematics, B.Sc. Computational Physics, B.Sc. Physics</i> </li> </ul>		Corvallis, OR 2004 - 2008
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Graduated Magna Cum Laude with minors in Actuarial Sciences and Mathematical Sciences</li> </ul> </li> </ul>		
<b>Research and Work Experience</b>		
<ul style="list-style-type: none"> <li> <b>SigOpt Inc - <a href="https://sigopt.com">https://sigopt.com</a></b>  <i>Co-founder and CEO</i> </li> </ul>		San Francisco, CA November 2014 - current
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>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.</li> </ul> </li> </ul>		
<ul style="list-style-type: none"> <li> <b>Yelp Inc</b>  <i>Data Mining Engineer and Lead on Ad Targeting Team</i> </li> </ul>		San Francisco, CA July 2012 - December 2014
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <b>Optimization:</b> Co-developed and led team for MOE: the Metric Optimization Engine (<a href="https://github.com/Yelp/MOE">github.com/Yelp/MOE</a>, an <b>open source</b> optimization framework), found significant gains in different metrics across the organization using Bayesian Global Optimization algorithms. </li> <li> <b>Targeting:</b> 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. </li> <li> <b>Recruiting:</b> Created, implemented, and directed <a href="https://yelp.com/dataset_challenge">yelp.com/dataset_challenge</a>, gave tech talks across the country, led events, gave hundreds of technical interviews, closed candidates. </li> </ul> </li> </ul>		
<ul style="list-style-type: none"> <li> <b>Bloomberg LP</b>  <i>Financial Software Development Intern</i> </li> </ul>		New York, NY Summer 2011
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Implemented statistical models to perform forward and backward portfolio analysis</li> </ul> </li> </ul>		
<ul style="list-style-type: none"> <li> <b>DOE Joint Genome Institute (Lawrence Berkeley National Lab)</b>  <i>Researcher in Analysis Group under Dr. Zhong Wang</i> </li> </ul>		Walnut Creek, CA Summer 2010
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Used machine learning to mine TBs of genome data efficiently using novel likelihood function</li> </ul> </li> </ul>		

<ul style="list-style-type: none"> <li> <b>Los Alamos National Laboratory</b>  <i>Researcher in Metagenomics Group under Dr. Nick Hengartner</i> <ul style="list-style-type: none"> <li>Used statistical models to discover sequence alignments using parallel algorithms on GPUs</li> </ul> </li> </ul>	Los Alamos, NM Summer 2009
<ul style="list-style-type: none"> <li> <b>Oregon State University</b>  <i>Research Assistant under Prof. Malgorzata Peszynska and Prof. Rubin Landau</i> <ul style="list-style-type: none"> <li>Finite element analysis with uncertainty and web-based teaching in Java</li> </ul> </li> </ul>	Corvallis, OR 2005-2008
<ul style="list-style-type: none"> <li> <b>Max Planck Institute for the Physics of Complex Systems</b>  <i>NSF REU Research Assistant under Prof. Steven Tomsovic</i> <ul style="list-style-type: none"> <li>Research on extreme value statistics in MATLAB and FORTRAN</li> </ul> </li> </ul>	Dresden, Germany Summer 2007
<ul style="list-style-type: none"> <li> <b>University of California: Davis</b>  <i>NSF REU Research Assistant under Prof. Daniel Cox</i> <ul style="list-style-type: none"> <li>Computational biophysics research as applied to protein folding in Java</li> </ul> </li> </ul>	Davis, CA Summer 2006
<b>Writing and Awards</b>	
<ul style="list-style-type: none"> <li><b>2016 Forbes 30 Under 30:</b> Enterprise Tech. <a href="http://onforb.es/10ILpBZ">http://onforb.es/10ILpBZ</a></li> <li><b>Department of Energy Computational Science Graduate Fellow:</b> Four year full fellowship. ~20 awarded nationally per year. Won the Communicating Science award (<a href="http://bit.ly/VbcTZK">bit.ly/VbcTZK</a>).</li> <li><b>SigOpt Blog:</b> Posts talking about using SigOpt to optimize everything (<a href="http://blog.sigopt.com">blog.sigopt.com</a>).</li> <li><b>Yelp Blog:</b> Wrote several posts announcing the open sourcing of MOE, the Yelp Dataset Challenge and more. <a href="http://bit.ly/1x73xdr">bit.ly/1x73xdr</a>, <a href="http://bit.ly/1oCCZvv">bit.ly/1oCCZvv</a>, <a href="http://bit.ly/1s0sEBS">bit.ly/1s0sEBS</a>, <a href="http://bit.ly/1p1X7Hk">bit.ly/1p1X7Hk</a></li> <li><b>Press:</b> WSJ: <a href="http://on.wsj.com/Va0vqQ">on.wsj.com/Va0vqQ</a>, Cornell: <a href="http://bit.ly/1oB2dzm">bit.ly/1oB2dzm</a>, DIEXIS: <a href="http://bit.ly/1oofb14">bit.ly/1oofb14</a></li> </ul>	
<b>Skills</b>	
<ul style="list-style-type: none"> <li><b>Numerical Analysis and Computer Science:</b> Machine Learning, Data Mining, Optimization, Computational Science, Artificial Intelligence, Linear Algebra, Monte Carlo Methods, ODEs, PDEs, Iterative Methods, Parallel Programming, Distributed Systems, Data Structures</li> <li><b>Tech Stack:</b> Python, numerical libraries, linux, git, vim</li> <li><b>Public Speaking:</b> I've given several hundred technical talks to audiences at machine learning conferences, Fortune 500 boards, and beyond.</li> <li>Exploring and implementing ideas. Give me an API/dataset and a problem and I will figure it out.</li> </ul>	
<b>Selected Open Source Projects</b>	
<ul style="list-style-type: none"> <li> <b>SigOpt Examples (<a href="https://github.com/sigopt/sigopt-examples">github.com/sigopt/sigopt-examples</a>)</b>  <i>Examples of using SigOpt to tune ML algorithms.</i> <ul style="list-style-type: none"> <li>Examples of using SigOpt to tune everything from sklearn to beating Vegas and beyond.</li> </ul> </li> </ul>	Python 2014 - current

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**MOE: Metric Optimization Engine** ([github.com/Yelp/MOE](https://github.com/Yelp/MOE)) Python, C++, CUDA

- *A global, black box optimization engine for real world metric optimization* 2010 - 2015

- Implemented throughout Yelp, optimizing ad metrics. 2nd most popular open source project.
- Talk: [bit.ly/1p1YZA2](https://bit.ly/1p1YZA2), Slides: [slidesha.re/1z0r0Jy](https://slidesha.re/1z0r0Jy), Blog: [bit.ly/1x73xdr](https://bit.ly/1x73xdr)
- Presented to executives, universities, conferences and companies around the country.

**ALE: Assembly Likelihood Estimator** ([github.com/sc932/ALE](https://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