

WORK EXPERIENCE

GOOGLE	<p>Senior Product Technology Manager 04 / 2017 - Present</p> <p><i>Display Advertising Platforms (Display & Video 360 and Google Ad Manager)</i></p> <ul style="list-style-type: none"> Engage with Product Management and Engineering teams early in product lifecycle to ensure planned changes to Google's display advertising platforms meet the expectations & needs of our users. Assembled a team and lead the development of an internal tool (Espresso) from concept to launch as a 20% initiative. Espresso enables scaled cross-organizational communication for upcoming product launches/changes and was sanctioned as an official Google tool in August 2019. Earned rating of "Exceeds Expectations" or "Strongly Exceeds Expectations" for all performance cycles in last two years. Received promotion from Technology Manager to Senior Technology Manager in October 2019.
LEGAL HERO	<p>Co-founder & Director of Engineering 09 / 2014 - 03 / 2017</p> <p><i>Legal Hero provides access to top-tier legal consultation for start-ups and small-businesses</i></p> <ul style="list-style-type: none"> Designed and developed full-stack web platform, built a REST API to serve AngularJS frontend and deployed background services for scalable integration with third party tools. Deployment and configuration was managed by Chef on AWS. Built and launched platform from concept to a revenue making product in less than two months time. Led meetings and planning for development of product relating to company strategy. Maintained net promoter score (NPS) of 85 and annual revenue increased from \$0 to over \$400,000 in one year.
GENERAL ASSEMBLY	<p>Data Science Course Instructor (part-time) 02 / 2015 - 08 / 2016</p> <p><i>General Assembly transforms thinkers into creators through education and opportunities in technology, business, and design</i></p> <ul style="list-style-type: none"> Lectured for 3 hours twice per week. Topics included mining and analyzing data, designing and evaluating models for supervised and unsupervised machine learning problems, and managing data in a production environment. Developed curriculum and all instructional materials used throughout the course. Technologies used included Python, SQL, and the Unix shell. Mentored students regularly on a one-on-one basis to help with learning concepts and the class project.
HANDY INC.	<p>Director of Data Science 02 / 2014 - 09 / 2014</p> <p><i>Handy is an international platform through which users can book cleaners, handymen, and other household service providers.</i></p> <ul style="list-style-type: none"> Led development of company's data and reporting infrastructure. This included the design and deployment of data pipeline services, internal reporting tools, and forecasting models which served the company's strategic and operational objectives. Designed, developed and deployed models responsible supply/demand forecasting to drive dynamic pricing (i.e. "surge price" optimization). Led initiatives to redesign database structure to support scalable growth, reducing booking time from tens of seconds to hundreds of milliseconds (100x+ improvement).
ANYONEGAME, INC.	<p>Co-founder & Chief Technology Officer 02 / 2013 - 02 / 2014</p> <p><i>AnyoneGame is a social mobile gaming company backed by Lerer Hippeau Ventures, Tribeca Venture Partners, M8 Capital, and Eniac Ventures</i></p> <ul style="list-style-type: none"> Led team development (four engineers) from product concept to launch. Responsibilities included hiring, managing code reviews, establishing development principles, maintaining software reliability across release cycles. App received consistent reviews of 4.5 stars with over 100,000 downloads in the month following release. Designed, developed, tested, and deployed REST API (Ruby on Rails) serving both web and mobile (iOS & Android) frontends. API response times were time-critical and consistently completed in less than 35 milliseconds. Managed development operations (dev-ops) for a multi-server architecture running Ruby on Rails, MySQL, Redis, HAProxy and Sphinx running on AWS.
COLUMBIA UNIVERSITY	<p>Ph.D. Candidate, Bioelectronic Systems Lab 08 / 2010 - 05 / 2013</p> <p><i>The Bioelectronic Systems Lab is a multidisciplinary research group pursuing novel applications of traditional electronics in the areas of chemistry and biology.</i></p> <ul style="list-style-type: none"> Designed and carried out experiments to study electrical properties of single-walled carbon nanotubes (SW-CNTs) in biological environments. Assisted in managing and maintaining the lab's self-hosted server network responsible for running simulations and data analysis.
EDUCATION	<p>Columbia University in the City of New York 2010 - 2011</p> <p>Master of Science (M.S.), Electrical Engineering 3.8 GPA</p> <p>University of California, Los Angeles 2007 - 2010</p> <p>Bachelor of Science (B.S.), Electrical Engineering 3.4 GPA</p>

PROJECTS

CIRCUIT BOX

Founder & Creator

04 / 2012 - Present

<https://circuitlab.herokuapp.com/>

Circuit Box is an interactive circuit simulator written in JavaScript on Node.js. Using numerical solvers (Euler's method), it can compute and render voltages and currents for complex analog and digital circuits at multiple frames per second.

PATENTS

Compact Automated Semen Analysis Platform using Lens-Free On-Chip Microscopy

12 / 2011

patents.google.com/patent/US8842901B2

A compact and light-weight lens-free platform to conduct automated semen analysis utilizing holographic on-chip imaging without lenses, lasers or other bulky optical components.

PUBLICATIONS

High-throughput lens-free blood analysis on a chip

05 / 2010

Analytical Chemistry

[ncbi.nlm.nih.gov/pubmed/20450181](https://pubmed.ncbi.nlm.nih.gov/20450181)

Lensfree Holographic Imaging for On-chip Cytometry and Diagnostics

12 / 2008

Lab on a Chip

[ncbi.nlm.nih.gov/pubmed/19255659](https://pubmed.ncbi.nlm.nih.gov/19255659)

High-throughput lensfree imaging and characterization of a heterogeneous cell solution on a chip

09 / 2008

Biotechnology and Bioengineering

[ncbi.nlm.nih.gov/pubmed/18853435](https://pubmed.ncbi.nlm.nih.gov/18853435)

Lensfree Holographic Imaging of Antibody Microarrays for High-Throughput Detection of Leukocyte Numbers and Function

04 / 2010

Analytical Chemistry

[ncbi.nlm.nih.gov/pubmed/18853435](https://pubmed.ncbi.nlm.nih.gov/18853435)

Detection of waterborne parasites using field-portable and cost-effective lensfree microscopy

04 / 2010

Lab on a Chip

[ncbi.nlm.nih.gov/pubmed/18853435](https://pubmed.ncbi.nlm.nih.gov/18853435)

<https://pubs.acs.org/doi/abs/10.1021/ac100142a>

AWARDS & HONORS

NSF IGERT Fellowship

2011

IGERT has been the National Science Foundation's flagship interdisciplinary training program, educating U.S. Ph.D. scientists and engineers by building on the foundations of their disciplinary knowledge with interdisciplinary training.

NSF Graduate Research Fellowship (GRFP)

2010

The NSF GRFP is a nationally recognized fellowship supporting graduate research in science and engineering. It is one of the oldest and most prestigious fellowships in the United States with 2,000 awards granted out of 12,000 applications in 2011.