Anthony Erlinger

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Work Experience

Legal Hero

Co-founder & Director of Engineering   *08 / 2014 - Present*

Legal Hero provides incredible lawyers for clearly priced projects, making the process of finding a lawyer transparent and straightforward.

- Designed and developed full-stack web platform, built a RESTful 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

Data Science Course Instructor   *02 / 2015 - 05 / 2015*

General Assembly transforms thinkers into creators through education and opportunities in technology, business, and design.

- Lectured for three hours twice per week. Covered 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 (Handybook)

Director of Data Science   *02 / 2014 - 08 / 2014*

Handy is an international platform through which users can book cleaners, handymen, and other household service providers.

- Led key data initiaves of the company, including the development of internal tools and data pipelining services. These services were critical in allowing internal data to be accessible and actionable in guiding the company's strategic and operational objectives.
- Built new custom dashboarding and data visualization tools utilized across all domains of the company for purposes of reporting and business intelligence.
- Developed and employed "surge pricing" algorithms responsible for adjusting prices based on economic fluctuations in supply and demand over time.
- Led initiatives to migrate and refactor existing legacy database schema to a more scalable and maintainable structure.

AnyoneGame, Inc.

Co-founder & Chief Technology Officer   *02 / 2013 - 02 / 2014*

AnyoneGame is a social mobile gaming company backed by Lerer Hippeau Ventures, Tribeca Venture Partners, M8capital, and Eniac Ventures.

- Led team development (four engineers) of product from concept to launch. Responsibilities included hiring, managing code reviews, establishing core development principles, maintaining software reliability across release cycles.
- Designed, developed, tested, and deployed REST API 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.
- App received consistent reviews of 4.5 stars with over 100,000 downloads.

Columbia University

Ph.D. Candidate, Bioelectronic Systems Lab   *08 / 2010 - 05 / 2013*

The Bioelectronic Systems Lab is a multidisciplinary research group pursuing novel applications of traditional electronics in the areas of chemistry and biology.

- 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

Columbia University in the City of New York   *2010 - 2011*

Master of Science (M.Sc.), Electrical Engineering. 3.7 GPA

University of California, Los Angeles   *2007 - 2010*

Bachelor of Science (B.S.), Electrical Engineering 3.4 GPA

Projects

Physics Academy

Founder & Creator   *04 / 2012 - Present*

http://www.physicsacademy.com/

Physics Academy's mission is to make learning physics fun and accessible to anyone in the world by developing new technologies for interactive education.

<div align="right">

04 / 2012 - Present
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CIRCUIT BOX

Founder & Creator

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 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*

Anthony Erlinger, Ting-Wei Su, Aydogan Ozcan
<div align="right">Patent link: http://goo.gl/edSSes</div>

A compact and light-weight lens-free platform to conduct automated semen analysis is disclosed. The device employs holographic on-chip imaging and does not require any lenses, lasers or other bulky optical components.

PUBLICATIONS

High-throughput lens-free blood analysis on a chip *05 / 2010*

Analytical Chemistry
<div align="right">Publication link: http://goo.gl/IsXd63</div>

Anthony Erlinger, Sungkyu Seo, Serhan O. Isikman et. al.

We present a detailed investigation of the performance of lens-free holographic microscopytoward high-throughput on-chip blood analysis.

Lensfree Holographic Imaging for On-chip Cytometry and Diagnostics *12 / 2008*

Lab on a chip
<div align="right">Publication link: http://goo.gl/g8heh5</div>

Anthony Erlinger, Sungkyu Seo, Ting-Wei Su, Derek Tseng

We experimentally illustrate a lensfree holographic imaging platform to perform on-chip cytometry. By controlling the spatial coherence of the illumination source, we record a 2D holographic diffraction pattern of each cell or micro-particle on a chip using a high resolution sensor array that has approximately 2 micron pixel size.

High-throughput lensfree imaging and characterization of a heterogeneous cell solution on a chip *09 / 2008*

Biotechnology and Bioengineering
<div align="right">Publication link: http://goo.gl/szhOkH</div>

Anthony Erlinger, Sungkyu Seo, Ting-Wei Su

A high-throughput on-chip imaging platform that can rapidly monitor and characterize various cell types within a heterogeneous solution over a depth-of-field of approximately 4mm.

AWARDS & HONORS

Columbia Venture Competition (CVC) Finalist *2012*

The Columbia Venture Competition is an annual competition in which students and alumni compete for $100,000 in seed capital. 8 finalists were selected out of over 70 applications.

NSF Graduate Research Fellowship Program (GRFP) *2011*

The NSF GRFP is a fellowship supporting graduate research in science and engineering. It is one of the oldest and most prestigious fellowships in the United States and 2,000 awards were selected from 12,000 applications in 2011.