Anthony Erlinger

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https://github.com/aerlinger

Skills

I've been fortunate to have had a diverse career that

Work Experience

Legal Hero

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

- Responsible for all technology and software development aspects of the company.

General Assembly

Data Science Course Instructor (Part time temporary position) *02 / 2015 - 05 / 2015*

- 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.
- Met with 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*

- Responsibilities encompassed all data related initiatives within the company. Specifically, this included making data accessible and useful in a scalable manner to enable the company's strategic and operational objectives.
- Led development, deployment, and management of company's internal ETL data pipeline.
- Built new custom dashboarding and data visualization tools utilized across all domains of the company for reporting and business intelligence.
- Developed and employed "surge pricing" algorithms responsible for adjusting prices based on fluctuating supply and demand over time.

Anyone Game

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

- Led development of product from concept to launch. Responsibilities included managing team building and hiring decisions, design and implementation of the core architecture patterns, and development philosophies
- Designed, developed, tested, and deployed REST API serving both web and mobile (iOS & Android) frontends
- Managed development operations (dev-ops) for a multi-server architecture running Ruby on Rails, MySQL, Redis, HAProxy and Sphinx running on AWS

Columbia University

Ph.D. Candidate *02 / 2013 - 02 / 2014*

- 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.

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.

Circuit Box

Founder & Creator *04 / 2012 - Present*

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

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

Patents

Compact Automated Semen Analysis Platform using Lens-Free On-Chip Microscopy *12 / 2011*

Anthony Erlinger, Ting-Wei Su, Aydogan Ozcan Patent link: http://goo.gl/edSSes

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 to achieve phase and amplitude imaging of sperm a relatively large field-of-view with an effective numerical aperture of approximately 0.2.

Publications

Lensfree Holographic Imaging for On-chip Cytometry and Diagnostics

12 / 2008

Lab on a chip

Publication link: http://goo.gl/g8heh5

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 microm pixel size.

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

09 / 2008

Biotechnology and Bioengineering

Publication link: http://goo.gl/szhOkH

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 and a field-of-view of approximately 10 cm(2) is introduced.

Multi-Color LUCAS: Lensfree Holographic Imaging for On-Chip Cytometry and Diagnostics

2009

Cellular and Molecular Bioengineering

Publication link: http://goo.gl/2LQsMl

Anthony Erlinger, Sungkyu Seo, Ting-wei Su

We illustrate a high-throughput on-chip imaging platform that can rapidly monitor greater than 50,000 cells within a homogenous solution over a field-of-view (FOV) of several square centimeters.

Awards & Honors

NSF Graduate Research Fellowship Program (GRFP)

2011

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 to achieve phase and amplitude imaging of sperm a relatively large field-of-view with an effective numerical aperture of approximately 0.2.

NSF Graduate Research Fellowship Program (IGERT)

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