Anthony Erlinger

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https://github.com/aerlinger

Skills

Applied experience with Rails/Ruby, JS/Node/AJAX, Python, SQL, HTML/CSS, Unix, AWS, Chef, HTML/CSS, Mobile (both web and Android), R, Matlab, Julia. I have also made open source contributions within the Rails and Julia communities.

Work Experience

Legal Hero

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

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

Data Science Instructor (Part time role) 02 / 2015 - 05 / 2015

- Developed instructional materials and taught machine learning concepts and for working with data using Python, SQL, and the Unix shell.
- Expanded supplementary materials and introduced new and more frequent class feedback mechanisms.
- Lectured for three hours twice per week on concepts including cleaning, processing data, and querying data as well as building and evaluating models for machine learning.
- Met with students regularly on a one-on-one basis to help with learning concepts and the class project.

Handybook

Director of Data Science 02 / 2014 - 08 / 2014

- Responsible for all data related initiatives within the company. Specifically, this included making data accessible and useful in a scalable manner to enable 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 philosopies
- 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

Projects

Physics Academy

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

University of California, Los Angeles
2007 - 2010

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

Patents

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

Anthony Erlinger, Ting-Wei Su, Aydogan Ozcan 12 / 2011

Google Patents Page

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

Publications

Lensfree Holographic Imaging for On-chip Cytometry and Diagnostics

Lab on a chip 12 / 2008

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

http://pubs.rsc.org/en/Content/ArticleLanding/2009/LC/b813943a

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

Biotechnology and Bioengineering 09 / 2008

Anthony Erlinger, Sungkyu Seo, Ting-Wei Su

http://www.ncbi.nlm.nih.gov/pubmed/18853435

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 4 mm and a field-of-view of approximately 10 cm(2) is introduced. This powerful system can rapidly image/monitor multiple layers of cells, within a volume of approximately 4 mL all in parallel without the need for any lenses, microscope-objectives or any mechanical scanning.

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

Cellular and Molecular Bioengineering 2009

Anthony Erlinger, Sungkyu Seo, Ting-wei Su

http://link.springer.com/article/10.1007%2Fs12195-008-0018-6?LI=true

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. We refer to this technique as Lensfree Ultra-wide-field Cell monitoring Array platform based on Shadow imaging (LUCAS).