

# Eric Christopher Darsow

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## Education

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### **Carnegie Mellon University, HJ Heinz III College**

*Pittsburgh, PA: Sept 2015 – Dec 2016*

- Master Information Systems Management | Database management and mapping focus | GPA: 3.74
- Relevant coursework: Linux and open source software, advanced database administration and design (Oracle 11g, MySQL), data structures and algorithms, object-oriented analysis and design
- Community Service: Associate Director of Community Outreach: Students for Urban Data Systems (suds-cmu.org). Assembled and managed team of six CMU graduate students to analyze and interactively share the results of a community health survey conducted in Pittsburgh's Hazelwood neighborhood

### **Brigham Young University, Marriott School of Management**

*Provo, UT: Sept 2005 – Dec 2009*

- Bachelors of Science, Management | Emphasis: Organizational behavior & human resources.
- Secondary major: Social anthropology; Minor: International development | GPA: 3.87, Cum Laude Honors
- Composed 9,000-word senior thesis drawn from seven months of ethnographic field research in South Africa Presented findings related to non-governmental organizational effectiveness at five conferences

## Technical Projects

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### **Municipal code enforcement PostgreSQL database system design**

*Turtle Creek Valley, PA: Fall 2016 - Present*

- Implementing Fall 2016 database design prototype: installing, configuring, and securing dedicated Linux web server for code enforcement data services. Will provide long-term maintenance and system upgrades.
- Designed 40-table PostgreSQL database through participatory design principles including field visits, narrative-based process inquiries, and structured user requirements interviews with staff and client municipalities of the Turtle Creek Valley Council of Governments east of Pittsburgh, PA
- Collaborated using command-line GIT; created browser-based web front-end using the Java DB connectivity library and Java/Glassfish web server running on Ubuntu 16.04 for client data access and updates
- Designed DB on Oracle Data Modeler; Python data migration scripts to extract data from legacy MS Access

### **Linux-based web server administration**

*Part time: Nov 2014 – Present*

- Setup and secure virtual private servers (Ubuntu Linux, Apache, MySQL, PHP, Java) for three organizational websites each running Wordpress CMS.
- Customize open-source Wordpress theme packages in HTML/PHP/CSS | troubleshoot plugin bugs | co-develop content design with clients | develop company logos using vector graphics packages and edit images

### **Genetic programming of optimal competitive strategy**

*Course project: Fall 2016*

- Object-oriented implementation of an evolutionary algorithm model in Java to develop a non-losing strategy for a two-computer-player simulation of tic-tac-toe; Systematically applied OO design patterns

### **Community health survey web portal for Greater Hazelwood Community Coalition**

*Oct 2015 – Dec 2016*

- Negotiated \$10k service contract to analyze and present findings from a survey of community members in Hazel wood, PA; Managed a team of 6 graduate students to extract core findings from survey results
- Configured domain routing for greaterhazelwoodcensus.org; configured and secured Wordpress CMS running on Apache2; firewall management in Ubuntu 16.04 (VPS); Wordpress theme editing in PHP and Javascript

## Work Experience

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### **Adjunct Instructor, Community College of Allegheny County**

*January 2017 - Present*

- Design course curriculum and implement in-class exercises for CIT111: Introduction to Programming: Java and LND241: Introduction to geographic information systems
- Developing guided, collaborative learning exercises for programming instruction which engage multi-modal learning inclinations, support student choice in determining optimal exercise complexity, and are relevant for all students in a class with widely varying skill levels.
- Maintain a dedicated, publicly-accessible course website (technologyrediscovery.net – Apache on Linux) to teach and share original coding exercises to support the development of 14 essential Java skills.

**Geospatial data engineer, CREATE Lab: Carnegie Mellon University** FT: May – Aug | PT: Sept – Dec 2016

- Assembled and visualized student discipline and achievement data for schools across PA using web-mapping solutions: the WebGL framework, Google Maps API, Javascript web libraries (Jquery, D3), and PostgreSQL
- Collaborated with the Education Law Center, a CREATE Lab partner, to tune data visualizations to maximize impact on state policy on behalf of students subject to unjust and illegal disciplinary action
- Designed and delivered professional development for the Fluency Project K-12 teacher cohort relating to data fluency and storytelling. Illuminated data as more than numbers: it's stories, images, and history

**Teaching assistant, Introduction to Mapping Systems: Heinz College, CMU** 10 hrs/wk; May – Dec 2016

- Provided student-centered mentoring & feedback on the ESRI ArcMap 10.3 and Arc Pro 1.3, including scheduling dozens of individual work-times to accommodate student schedules outside of office hours
- Lead interactive exercise to instill the concept of map coordinates and projections

**Community organizer & data specialist, Rhode Island Is Ready** Providence, RI: Nov 2014 – Apr 2015

- Initiated and conducted 12-15 one-on-one meetings per week with students, teachers, and elected officials to generate commitment to public education advocacy campaigns in 2015
- Design and implement organization-wide data systems to support community organizing work

**Cultural consultant & data manager: The Center for Social Ecology** Ashland, OR: Aug – Nov 2014

- Structured and composed project and grant proposals for foundations and government bid-seekers
- Facilitated two-day strategic planning retreat to rewrite the organization's mission & vision

**Teacher: Achievement First Amistad High School** New Haven, CT: July 2012 – June 2014

- Executed creative, data driven daily lessons to equip 93 tenth-grade students from low-income and minority backgrounds with college preparation skills and SAT success strategies
- Organized, trained, and implemented a 10<sup>th</sup> grade 1:1 student-Chromebook project | built course website
- Planned and co-facilitated staff-wide workshop series exploring racial and gender privilege

**Teach For America Corps Member: Palestine-Wheatley High School** Palestine, AR: 2010 – 2012

- Created and delivered objective-driven lessons which drove 8.7 points of average growth on the ACT- Reading exam--more than double the region-codified growth goal of 3 points
- Designed and analyzed multi-modal unit- and course-level academic performance assessments and created an accompanying spreadsheet tracking system

**Field research coordinator, BYU Political Science Dept** Kampala, Uganda: Jan – June 2010

- Implemented a field research project with a 3-member team to assess the quality of evaluation methods and donor relationships at community development NGOs operating throughout Uganda.

**Community research specialist, James Kent Associates** Eastern WA State: Feb – March 2010

- Implemented the firm's unique method, the community action framework, to engage community members in optimizing revisions to Washington State Bureau of Land Management's 10-year plan.

## Conferences Presentations

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**Mission-Money Tradeoff: Challenges of Government Service Provision by NGOs in South Africa**

Utah Academy of Sciences, Arts, and Letters | April 2010 | St. George Utah

**Just working to put food on the table: Fractured identities and mission drift in a South African nonprofit organization**

Annual Meeting of the Society for Applied Anthropology | March 2008 | Memphis, TN

Brigham Young University's International Inquiry Conference | March 2008

**Killer Growth: Participatory Strategic Planning and Development Nonprofit Over-diversification**

Brigham Young University's International Inquiry Conference | March 2007

## Undergraduate Engagement

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**Field research facilitator, BYU Int'l Field Studies Prgrm** East London, South Africa: Sept 2007 - Dec 2008

**Teaching assistant, BYU Kennedy Center for International Studies** Provo, UT: Fall 2007 & Fall 2009

**Co-President, BYU Students for International Development** Provo, UT: April 2007 - May 2008

**President & founder, BYU Students for Africa** Provo, UT: Winter 2007 & Fall 2007

**Research intern, Tri-County MN Department of Criminal Corrections** Rochester, MN: May - July 2006

**Secretary, National Advisory Panel on Student Concerns, The College Board** NYC, NY: Oct. 2003 – 2006