# **Eric Christopher Darsow**

#### **Education**

#### 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 (sudscmu.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**

#### 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, narrativebased 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

- 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

• 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

Part time: Nov 2014 - Present

- 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**

#### Faculty Instructor, Community College of Allegheny County

August 2017 - present

- Building collaborative in-person learning modules for Introduction to Programming: Java (CIT 111) and Computer Fundamentals (CIT-100) which connect student interests to cross-disciplinary course content.
- Developing online guided learning exercises for technical courses 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.

## Adjunct Instructor, Community College of Allegheny County

January 2017 - May 2017

• Designed course curriculum and implement in-class exercises for CIT111: Introduction to Programing: Java and LND241: Introduction to geographic information systems

#### 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, Javscript 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
- Oragnized, 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**

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**

Field research facilitator, BYU Int'l Field Studies PrgrmEast London, South Africa: Sept 2007 - Dec 2008Teaching assistant, BYU Kennedy Center for International StudiesProvo, UT: Fall 2007 & Fall 2009Co-President, BYU Students for International DevelopmentProvo, UT: April 2007 - May 2008President & founder, BYU Students for AfricaProvo, UT: Winter 2007 & Fall 2007Research intern, Tri-County MN Department of Criminal CorrectionsRochester, MN: May - July 2006Secretary, National Advisory Panel on Student Concerns, The College Board NYC, NY: Oct. 2003 - 2006