

## Education

- **University of Massachusetts, Amherst** Amherst, MA  
*MS/PhD, Computer Science* Sep. 2014 - Dec. 2020
  - Research interests: causality, experimental design, fairness, statistical relational learning
  - Relevant courses: Artificial Intelligence, Probabilistic Graphical Models, Recommender Systems, Econometrics
- **Hendrix College** Conway, AR  
*BA, Computer Science, Mathematics* Aug. 2010 - May 2014
  - Relevant courses: Database Systems, Combinatorics, Programming Languages
  - Award: 2013 Goldwater Scholarship

## Research, Work Experience

- **University of Massachusetts, Amherst** Amherst, MA  
*Research Assistant, Student of David Jensen* Sep. 2014 - present
  - Analyzed network A/B testing methods with adversarial network members and characterized best/worst case performance given  $k$  adversaries (R).
  - Developed a probabilistic model of jet engine maintenance scheduling from observational data (R, Python).
  - Identified a relationship between graph structure and variance of effect estimates in network A/B testing (R).
- **MIT Lincoln Laboratory** Lexington, MA  
*Summer Intern, Human Language Technology Group* June - Aug. 2017
  - Developed geographic relational models of census tract data for detection of structural changes over time (R, Python).
  - Built tools for visualization and analysis of census data trends over time at various geographic scales.
- **Axiom Corporation** Conway, AR  
*Data Analyst Intern, Products Organization* Jan. 2013 - Aug. 2014
  - Used Hadoop with Pig to aggregate, process, and mine social networking data (Java).
  - Developed processing pipelines for information extraction from raw text as part of a six-person team (Python).
- **University of Massachusetts, Amherst** Amherst, MA  
*Undergraduate Researcher - Mentored by Sridhar Mahadevan* May - Aug. 2012
  - Conducted self-directed research to compare four automatic basis construction methods in reinforcement learning in discrete and continuous environments (MATLAB).

## Publications, Presentations, and Posters

- Kaleigh Clary and David Jensen. “A/B Testing in Networks with Adversarial Members”. In: *13th International Workshop on Mining and Learning with Graphs, at KDD’17*. Halifax, Nova Scotia, Canada
- Kaleigh Clary and David Jensen. *Alternative approaches to discovering causality with additive noise models*. Poster presented at New England Machine Learning Day, April 15, Cambridge, MA. 2015
- Kaleigh Clary and Gabe Ferrer. *A comparison of the self-organizing map and the growing neural gas network in the context of optical character recognition*. Poster and presentation given at the Grace Hopper Celebration of Women in Computing, Baltimore, MD. 2012

## Leadership and Team Experience

- **Hack the Dinos Challenge, American Museum of Natural History** New York, NY  
Nov. 2015  
*Volunteer developer*
  - Worked with a small team of 6 over 24 hours to develop an application to build and render 3D models of dinosaur skulls from high resolution CAT scan images.
  - Applied kernel k-means to spacially cluster dinosaur skull segments and identify the brain case in the 3D model (MATLAB).
- **Girls, Inc. of Holyoke *Eureka!* Workshop** Amherst, MA  
June 2015  
*Mentor*
  - Taught middle school girls introductory programming skills using the Scratch programming language.
  - Led girls in a five-day workshop to develop interactive games using a mobile interface.

## Skills

**Languages, proficient:** Python, R, Java, SQL, Julia

**Languages, prior experience:** Hadoop (with Hive, Pig), C, JavaScript

**Applications:** MATLAB, L<sup>A</sup>T<sub>E</sub>X

## Awards

- 2013 Barry M. Goldwater Scholarship and Excellence in Education Program (\$7500)
- 2014 Victor Lesser Graduate Scholarship (\$1000)
- ACM Student Research Competition 2013 Semi-Finalist
- Acxiom Diversity Scholarship 2012, 2013 (\$10000)