

# Ryan Larson

☎ (612) 220-2262 | ✉ ryan-p-larson@uiowa.edu | 📷 ryan-p-larson | 🌐 ryanpatricklarson | 🐦 ryan\_p\_larson

South Austin, Texas 78704

## Education

### University of Iowa

Aug. 2013 – May 2017

MAJOR Bachelor of Arts (B.A.) in Informatics

Iowa City, IA

MINOR Computer Science, Psychology

### Published Work

- C. Koylu & R. Larson et al. (2018). CarSentoGram: Geovisual Text Analytics for Exploring Spatiotemporal Variation in Public Discourse on Twitter. *Cartography and Geographic Information Science*, 46 (1) - In Press [Article](#)

## Experience

### Desktop Support Analyst

July 2013 – Oct. 2018

COLLEGE OF PUBLIC HEALTH (CoPH)

Iowa City, IA

- Pitched, planned, and programmed *CPHB-Events*, a web application used daily at CoPH. Increased IT office efficiency 12.5% by automating event scheduling and management.
  - Site features included form validation, user/admin dashboards, interactive diagrams, and approval notifications. (React, Redux)
  - Created 20+ wireframes and components for *CPHB-Events*; integrated user feedback into prototypes from start to finish.
  - Created a RESTful backend for the app by integrating 7 APIs and serving 4 NoSQL tables. (Express, DynamoDB)
  - Reduced incorrect data submissions by 100%.
- Promoted to senior student employee after 2 years due to strong dept. impact; decreased monthly unresolved student tickets by half.
- Supervised 6 computer labs, 100+ desktop solutions, and 500+ hardware deployments as a student.

### Research Assistant

Feb. 2017 – July 2018

UNIVERSITY OF IOWA INFORMATICS INITIATIVE

Iowa City, IA

- Investigated abnormal tweets (72mil) in response to the Immigration Ban through topic and language modeling. Research presented at *2017 Political Networks Conference and Workshops*. (Pandas, Gensim, NLTK)
- Designed and built a visual analytics dashboard to explore variation on social media over time. (React, D3.js, Twitter API)
- Facilitated research within 4 person team by standardizing environments, building data pipelines, and automating experiments. (MAKE, Anaconda, PostgreSQL)
- Scraped and manipulated data sets from a variety of online sources. (maps, U.S. Census, Wikipedia)
- Authored and presented a Data Science Workshop for 30±3 people.

### Data Visualization Intern

June 2016 – Aug. 2016

ACT

Iowa City, IA

- Improved user experience by simplifying complex data with charts and visualizations. (D3.js, Bootstrap)
- Increased website engagement time by 1.5x in user testing by leveraging machine learning to personalize feedback and recommendations.

### Information Analyst Intern

June 2015 – Aug. 2015

ACT

Iowa City, IA

- Identified high-profile opportunity to maximize Co. efficiency by using statistical methods to analyze employee data sets (survey, text, metrics).
- Synthesized 11 proprietary and open sources; used outputs to guide product strategy recommendations. (Jupyter, NumPy)

## Skills

**Programming Languages** Python, JavaScript (JS), SQL, Bash

**Methods** Machine Learning (ML), Data Analysis, Data Visualization, Research Methods, Version Control (VC), Scripting

**Software** Pandas, Jupyter, Gensim, NLTK, OpenCV, SciKit-Learn, Tableau, NodeJS, D3.js, Git

## Projects

<b>Politiweets</b>	Identified bot networks pushing disinformation during the 2016 Presidential Election. (Pandas, Jupyter)	<a href="#">Link</a>
<b>Daily Iowan</b>	Published 4 monthly data-driven articles in school newspaper.	<a href="#">Link</a>
<b>Dotfiles</b>	Custom environments, scripts, and themes for my computers. Always tinkering! (UNIX)	<a href="#">Link</a>