#### AGRIPPA KELLUM

623 University Avenue, Ithaca, NY, 14850 / agrippakellum@gmail.com / 662.436.0357/ http://ask.fish

**Current Status:** Cornell University Sophomore majoring in Information Science and Government, with a minor in Philosophy

**Areas of Interest:** Labor, Technology, and Community Interactions; Markets; Collective Action; Social Contagion; Decentralized Selfish-user Systems; Productivity Software

**Skills:** Network Modeling; Data Mining; Visualization; Machine Learning; Bayesian Probability; Client-server Architecture; Cryptography

### **Programming:**

Python (scikits-learn and gensim [machine learning]; nltk [natural language processing]; pygame and matplotlib [visualizations]; basemap [geographical visualization]); JavaScript (d3 & jQuery); C#; Java

### **Experience:**

### Cornell University Social Dynamics Lab (2016-2017)

- Allowed replication of Twitter-based study in Facebook: Yongren Shi, Kai Mast, <u>Agrippa Kellum</u>, Michael Macy. "Cultural Fault-Lines and Political Polarization." In review.
- o Visualization Enhancement for figure depicting agreement of Amazon book reviewers by political party

## Independent Activities (2015-2016)

- Created visualization software depicting correlations within American Community Survey (ACS) county-level data that allows the addition of other county-level datasets, with a back-end server to process user requests and uploads (source of background image; http://ask.fish/corr)
- Productivity Software—created HTML5 webapp prototype using Google API
- Policy Analyst for Roosevelt Institute
- Editor for Logos Undergraduate Journal of Philosophy at Cornell
- Inter-Cooperative Council Co-President

# Mississippi State University Social Science Research Center (2011-2014; 2016)

- Intern/Student Worker
- Worked on the Social Media Tracking and Analysis System (SMTAS) project with the Innovative Data Laboratory
- Created prototype of a model to compare social media data and post-storm damage assessment maps in order to determine feasibility of predicting storm damage in advance of on-the-ground surveying
- Applied the model to Hurricane Sandy and the Moore, Oklahoma, tornado to compare its effectiveness with different types of natural disasters
- Provided foundational work for the SSRC National Oceanic and Atmospheric Administration-funded grant titled, "Assessment of Social Media Usage during Severe Weather Events and the Development of a Twitter-based Model for Improved Communication of Storm-related Information"
- Researched dependability of Twitter user profile information for social media analysis, such as disaster response
- Explored the use of unsupervised machine learning and natural language processing as a tool for analyzing trends in social media in real time
- Researched use of cell phones and other technology in Sierra Leone as a part of a research proposal to use cell phones as a way of spreading medical information and serving as medical reporting tools to public health workers

### Mississippi School for Mathematics and Science (2013-2015)

- Essay Published in The Atlantic.com (http://www.theatlantic.com/education/archive/2016/02/punching-above-their-weight-in-mississippi/462453/)
- o Independent Study in Cryptocurrency/Cryptocurrency Club Founder
- Independent Study: Computer Simulation in Biomechanics
- Designed and programmed agent-based model of foot traffic in 36-hour HiMCM modeling competition
- Programming Class Proposal to help Mississippi students build self-directed programming skills after school, particularly in disadvantaged districts (http://tinyurl.com/agrippaproposal/)