Lia Chen Bozarth
lbozarth@umich.edu
www.lbozarth.com

EDUCATION

PhD.	Information School, University of Michigan	Sep 2016- May 2021
B.S.	Computer Science, University of Washington	Sep 2009- Dec 2012

PUBLICATIONS

Lia Bozarth & Joyojeet Pal, "*Twitter Discourse as a Lens into Politicians' Interest in Technology and Development*", in proceedings, ICTDX (2018).
Lia Bozarth & Ceren Budak, "*Is Slacktivism Underrated? Measuring the Value of Slacktivists for Online Social Movements*", in proceedings, ICWSM (2017).

IN PRESS:

Joyojeet Pal & Lia Bozarth, "*How Modi lost his mojo and Rahul roared to life on Twitter*", Quartz (2018).
Joyojeet Pal & Lia Bozarth, "*Is Tweeting in Indian Languages Helping Politicians Widen Their Reach?*", Economic and Political Weekly (2018).

IN PROGRESS:

Lia Bozarth, Anmol Panda, Joyojeet Pal, "*From Greetings to Corruption: Politicians, Political Parties, and Tweeting in India*".
Lia Bozarth, Aparajita Saraf, Ceren Budak, "*Higher Ground? How Groundtruth Labeling Impacts Our Understanding of the Spread of Fake News During the 2016 Election"*.
Lia Bozarth, Ceren Budak, "*Lay it Out: Detecting Fake News Publishers through Website Structure Data*".
Lia Bozarth, Ceren Budak, "*Beyond the Eye-Catchers: a Large-Scale Study of Social Movement Organizations' Involvement in Online Protests*".

PROGRAMMING & DATA ANALYTICS SKILLS

- Programming Languages: Python, R, Java, Javascript, PHP, and MySQL.
- Methods(techniques): network analysis, natural language processing (NLP), data mining, database management, data visualization, machine learning, web services, and Mechanical Turk crowdsourcing.
- Theories: network diffusion, media effects, political mass communication, information dissemination, power law, social capital, tie strength, collective action, social media activism.

RESEARCH HISTORY

Research Intern — Microsoft Research, India — Summer, 2018

- Collected the tweets of top 4K most influential Indian Twitter accounts, 1.9K of which are Indian politicians from both national and regional levels.
- Built a pipeline on top of an ElasticSearch database to continuously aggregate and

store new tweets.
- Supervised web-based front-end data visualizations of Indian politicians' tweets
- Conducted research centered on politicians' social media strategies including their use of hashtags in agenda-setting, their interaction patterns with others of the same/opposing party, or news media; their linguistic characteristics when discussing policy-centric versus non-policy related topics. Results were published in both the academia and the press.

Research Assistant University of Michigan, Ann Arbor Sep 2016 -
- Built nested supervised learning models and identified more than 50 thousand social movement organizations (SMO) participating in 2 distinct movements on Twitter. [identify what these are if they would be relevant to the campaign and the position you are applying for] Applied network analysis and nlp method to assess the functions and influence of SMOs in online protests.
- Conducted topic modeling, sentiment analysis, tweet classification, propensity score matching, network analysis, and visualization on dataset to assess slacktivist contribution to online activism with respect to a wide scope of dimensions. Captured novel results within the field of social media activism and drafted a full paper within the first four months as a research assistant while taking the required coursework. The paper was accepted as a short paper in ICWSM 2017.

Visiting Researcher University of Washington, Seattle Aug 2015 - Jan 2016
- Developed code to crawl top United States and Chinese websites in diverse categories, assessed and recorded each webpage's complexity score using method from existing literature. The goal of this project was to determine whether high-complexity webpages reduce user task performance. Designed draft experiments analyzing the effect of the webpage complexity on work efficiency of native Chinese speakers and of native English speakers.
- Presented and defended proposals during project reviews, finalized research methods, implemented experiments to the production code repository.

WORK HISTORY

Software Engineer Google Inc., Social Infrastructure Jun 2014 – Feb 2016
- Key engineer in the development and integration of the Revert API in SuperGlue, the new social graph backend. The streamlined API allows frontend clients to undo adding or removing CircleMemberships from Circles. Expanded Revert API to support User, Collexions, and GGG namespaces. Formulated and completed the new API's extensive Integration Test Matrix.
- Re-architectured existing extended-circle Access Control List (ACL) code path within Focus Backend Service (FBS). Migrated FBS codebase to use Zanzibar, the new Google ACL storage and evaluation service. This was completed as a part of Google's global strategy to migrate all ACL related services to utilize Zanzibar.
- Implemented a new MapReduce to backfill missing SocialEntities in SuperGlue using FlumeJava. Integrated BORG infrastructure to allow efficient command line execution.

- Coordinated with the social frontend management and development staff to migrate all clients from the old FBS Contact APIs for Circles and CircleMemberships to the new FBS Social APIs. This optimization was required to disentangle FBS from Google+ data.

Software Engineer Amazon Inc., External Payments Feb 2013 – Jun 2014

- Developed Instant Payment Notification (IPN) Integration Tool in SellerCentral. The tool allows merchants to customize and send IPNs in a test environment to verify their own transactions execution. Statistics showed 17% of the merchants required technical support to complete the IPN integration steps; the tool virtually eliminated their need to contact the support team.
- Coordinated the development of Amazon Advanced Payment Main Integration Tool. Major project achievements included development of data access layer to DynamoDB; added data interceptor to the main service to retrieve relevant events; completed the tool's beta UI.
- One of the key engineers for External Payments Batch Processing Service development. My tasks included development of a new Instant Payment Notification (IPN) to the workflow; built Phase I operations tool; designed end-to-end integration tests; integrated Amazon monitoring service into Batch Processing System; developed a comprehensive DashBoard documentation for this service.

Software Engineer Intern, Expedia Inc., Orders Jun 2012 – Sep 2012

- Remodeled OMS's (Order Management Service) data search platform to implement more advanced indexing/search capability; utilizing Solr & Lucene, Tomcat, JAXB, SOAP, XML

ACADEMIC SERVICE:

- Graduate Student Instructor (GSI) at the University of Michigan
- Elected Student Representative in Rackham Graduate Student Government
- Coordinator for Computational Social Science Reading Group (CSSRG)