

SINDHU KIRANMAI ERNALA

CONTACT	<p>CODA Tech Square 756 W Peachtree St NW Atlanta, GA 30308</p> <p>Email : sernala3@gatech.edu Web : www.sindhuernala.com Phone : +1-646-764-6764</p>
RESEARCH INTERESTS	<p>I am broadly interested in Computational Social Science, applying methods from machine learning, statistical modeling, and natural language processing to questions around health and well-being. My research aims to understand the efficacy of social media for mental health interventions.</p>
EDUCATION	<p>Doctor of Philosophy, Computer Science 2016 - present Georgia Institute of Technology Advisor : Munmun De Choudhury</p> <p>Bachelor of Technology, Computer Science 2011 - 2016 with Master of Science, Exact Humanities International Institute of Information Technology Hyderabad, India Thesis title : Towards Construction of Social Automaton</p>
EXPERIENCE	<p>Graduate Research Assistant August 2016 - present <i>Social Dynamics and Well-being Lab, Georgia Institute of Technology</i></p> <p>External Research Collaborator August 2019 - present <i>Pro Unlimited @ Facebook Inc.</i></p> <p>Core Data Science Intern May 2019 - August 2019 <i>Facebook Inc., Menlo Park</i></p> <p>Research Intern May 2017 - August 2017 <i>Information Science Institute, USC</i></p> <p>Research Intern May 2015 - August 2015 <i>Xerox Research Center India</i></p> <p>Visiting Student Researcher May 2014 - July 2014 <i>Insight Center for Data Analytics, Ireland</i></p> <p>Software Developer Intern May 2013 - July 2013 <i>Imaginate Software Labs</i></p>
PUBLICATIONS	<p>Refereed Journal Articles</p> <p>[1] Birnbaum, M.*, Ernala, S. K.*, Rizvi, A. F., Arenare, E., Van Meter, A., De Choudhury, M., Kane, J. (2019). Detecting Relapse in Youth with Psychotic Disorders Utilizing Patient-Generated and Patient-Contributed Digital Data from Facebook. In npj Schizophrenia. To appear. (* co-first authors)</p>

- [2] Saha, K., Torous, J., **Ernala, S. K.**, Rizuto, C., Stafford, A., & De Choudhury, M. (2019). A Computational Study of Mental Health Awareness Campaigns on Social Media. In **Translational Behavioral Medicine**.
- [3] Birnbaum, M.*, **Ernala, S. K.***, Rizvi, A., De Choudhury, M. & Kane, J. (2017). A Collaborative Approach to Identifying Social Media Markers of Schizophrenia by Employing Machine Learning and Clinical Appraisals. In **Journal of Medical Internet Research (JMIR)**.
(equal contribution)*

Refereed Conference Proceedings

- [1] **Ernala, S. K.**, Birnbaum, M., Candan, K., Rizvi, A., Sterling, W., Kane, J., & De Choudhury, M. (2018). Methodological Gaps in Predicting Mental Health States from Social Media : Triangulating Diagnostic Signals. In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems. CHI 2019.
- [2] **Ernala, S. K.**, Labetoulle, T., Bane, F., Birnbaum, M., Rizvi, A., Kane, J., & De Choudhury, M. (2018). Characterizing Audience Engagement and Assessing its Impact on Social Media Disclosures of Mental Illnesses. In Proceedings of the 12th International AAAI Conference on Web and Social Media. ICWSM 2018.
- [3] **Ernala, S. K.**, Rizvi, A., Birnbaum, M., Kane, J., & De Choudhury, M. (2018). Linguistic Markers Indicating Therapeutic Outcomes of Social Media Disclosures of Schizophrenia. In Proceedings of the 21st ACM Conference on Computer-Supported Cooperative Work and Social Computing. CSCW 2018 Online First.
- [4] Sharma, E., Saha, K., **Ernala, S. K.**, Ghoshal, S., & De Choudhury, M. (2017). Analyzing Ideological Discourse on Social Media : A Case Study of the Abortion Debate. In Proceedings of the CSSA's Annual Conference on Computational Social Science. CSS 2017.
- [5] Banerjee, J., Raravi, G., Gupta, M., **Ernala, S. K.**, Kunde, S., & Dasgupta, K. (2016). CAPReS : Context Aware Persona Based Recommendation for Shoppers. In AAAI Conference on Artificial Intelligence. AAAI 2016.

Refereed Workshop Papers

- [1] Sapienza, A.*, **Ernala, S. K.***, Bessi, A., Lerman, K., & Ferrara, E. (2018). DISCOVER : Mining Online Chatter for Emerging Cyber Threats. In Proceedings of the 3rd Workshop on Computational Methods in CyberSafety, Online Harassment and Misinformation at WWW 2018.
(equal contribution)*
- [2] Poddar, S.*, **Ernala, S. K.***, & Singh, N. (2016). PACMAN : Psycho and Computational Framework of an Individual. In Proceedings of the Workshop on Emotion and Sentiment Analysis at the 10th International Conference on Language Resources and Evaluation (LREC). *(* co-first authors)*
- [3] Poddar, S.*, **Ernala, S. K.***, Singh, N., & Samvara, A. (2016). Towards a Ubiquitous Model of an Individual in Social Machines. In Proceedings of the 25th International Conference Companion on World Wide Web. WWW 2016. *(* co-first authors)*
- [4] Asooja, K., **Ernala, S. K.**, & Buitelaar, P. (2015). UNLP at the MediaEval 2015 C@merata Task. In MediaEval 2015.
- [5] Asooja, K., **Ernala, S. K.**, & Buitelaar, P. (2014). UNLP at the MediaEval 2014 C@merata Task. In MediaEval 2014.

Refereed Presentations/Abstracts

- [1] **Ernala, S. K.**, Rizvi, A., Birnbaum, M., Kane, J., & De Choudhury, M. (2018). Using Social Media to Identify Risk Markers and Predict Relapse in Schizophrenia. Presented at Social Media and Health Workshop at the International Conference on Web and Social Media. ICWSM 2018

- [2] Birnbaum, M., De Choudhury, M., Rizvi, A., **Ernala, S. K.**, Cecchi, G., & Kane, J. (2018). Identifying Psychotic Symptoms and Predicting Relapse through Social Media Data. In International Conference on Early Intervention in Mental Health. IEPA 2018.
- [3] Birnbaum, M., De Choudhury, M., Rizvi, A., **Ernala, S. K.**, & Kane, J. (2018). Identifying Psychotic Symptoms and Predicting Relapse through Social Media Data. In Fourth Meeting on Patient Reported Outcomes and Person Centered Care in Mental Health - Symptoms of Mental Disorders : New Research, Treatments, Digital Health, American Association for the Advancement of Science. AAAS.
- [4] Birnbaum, M., Rizvi, A., De Choudhury, M., **Ernala, S. K.**, Cecchi, G., & Kane, J. (2018). Identifying Psychotic Symptoms and Predicting Relapse Through Social Media. Schizophrenia Bulletin, 44(Suppl 1), S100.

PATENTS

- [1] Raravi, G., Kunde, S., Eswaran, S., Chander, D., Rangaswamy, N., Banarjee, J., Ernala, S. K., Radhakrishnan, M., & Sharma, P. Systems and methods for enhancing shopping experience in physical stores
- [2] Banarjee, J., Raravi, G., Gupta, M., Ernala, S. K., Kunde, S., & Dasgupta, K. Method and system for data processing to recommend list of physical stores in real-time

TALKS & DEMOS

- Mining online chatter for emerging cyber threats, Cybersecurity Lecture series, Georgia Tech.
- THRIVE : Technology and Health Related Information to improve wellness, GVU Fall Research Showcase, Georgia Tech.
- DISCOVER : Generating early warning of cyber threats from online discussions. AI Seminar, Information Sciences Institute, University of Southern California.
- Examining linguistic markers leading to and following social media disclosures of schizophrenia, GVU Fall Research Showcase, Georgia Tech.

SERVICE & SKILLS

PC Member : WNUT 2019 at EMNLP, The Web Conference (Health on the Web) 2020.

Reviewing : ICWSM, CSCW, CHI, ECIS, JMIR, ToCHI

Mentoring : I.AM.GradComputing Workshop in Atlanta (2019).

Programming : Python, R, C++, Java, C, SQL, Bash, Presto, Javascript

AWARDS & HONORS

- Accepted to the Computing Resesarch Association Grad Cohort for Women program 2019
- Dean's Merit List (top 5% of the class) for Academic Excellence for 2014, 2015 at IIIT-H
- Commendation award for contributions to all round activities and leadership at IIIT-H