#### **Sashank Santhanam**

Department of Computer Science University of North Carolina at Charlotte 9201 University City Blvd, Charlotte, NC - 28223 ssantha1@uncc.edu • (267) 575-6385

#### **Education**

# University of North Carolina – Charlotte Ph.D. in Computer Science

Charlotte, NC expected May 2021

- Research area: Dialogue Systems, Human Behavior Modeling
- Advisors: Dr. Samira Shaikh
- Committee: Dr. Wlodek Zadrozny, Dr. Minwoo Jake Lee, Dr. Nicholas Davis

University of North Carolina – Charlotte MS in Computer Science

Charlotte, NC Dec 2015

Anna University
BE in Computer Science and Engineering

Tamil Nadu, India May 2014

#### **Journal Publications**

Shaikh, S., **Santhanam S**., Srinivasan, V., Mahajan, K., "Towards Understanding the Pragmatics of Emojis through Solidarity Expressed during Crisis Events", Under Review in ACM Transaction of Social Computing, 2019

**Santhanam, S.**, Shaikh, S., "Survey of Natural Language Generation: A Perspective from Traditional Statistical Approaches to Deep Learning Approaches With a Focus on Dialogue Systems", Under Review in Journal of Intelligent Information Systems, 2019,

#### **Conference Publications**

**Santhanam S.**, Shaikh, S., "Salient Context Identification from Memory for Neural Dialog Systems", [Under Review, 2019]

Wesslen, R., **Santhanam, S.**, Karduni, A., Cho, I., Shaikh, S., Dou, W., "Investigating Effects of Visual Anchors on Decision-Making about Misinformation", in 21<sup>st</sup> International IEEE Conference on Visualization (EuroVis), Porto, Portugal, to appear,

Karduni, A., Cho, I. Wesslen, R., **Santhanam, S.**, Volkova, S., Arendt, D., Shaikh, S., Dou, W., "Vulnerable to Misinformation? Verifi!", in 24<sup>th</sup> ACM Conference on Intelligent User Interfaces, Los Angeles, USA, Mar. 16-20 2019,

Karduni, A., Wesslen, R., **Santhanam, S.**, Cho, I., Volkova, S., Arendt, D., Shaikh, S., Dou, W., "Can You Verifi This? Studying Uncertainty and Decision-Making about Misinformation in Visual Analytics.", in 12<sup>th</sup> International AAAI Conference on Web and Social Media, Stanford, USA, Jun. 25-28 2018, (*Acceptance Rate:* 16%)

**Santhanam S.**, Srinivasan, V., Glass, S., Shaikh, S., "I Stand With You: Using Emojis to Study Solidarity in Crisis Events", in Proceedings of 1<sup>st</sup> International Workshop on Emoji Understanding and Applications in Social Media (ICWSM), Stanford, USA, Jun. 25-28 2018, published by AAAI.

**Santhanam S.**, Shaikh, S., "I Stand With You: Detecting and Characterizing Expressions of Solidarity in Social Media", in 4<sup>th</sup> International Conference on Computational Social Science (IC2S2), Chicago, USA, July. 12-15 2018.

Cho, I., Wesslen, R., Karduni, A., **Santhanam, S.**, Shaikh, S., Dou, W., "The Anchoring Effect in Decision-Making with Visual Analytics", in 12<sup>th</sup> International IEEE Conference Visual Analytics Science and Technology, Phoenix, Arizona, Oct. 1-6 2017, (*Acceptance Rate: 22% - 25%*)

#### **Poster Presentations**

**Santhanam S.**, Shaikh, S., "Salient Context Identification from Memory for Neural Dialog Systems", in 2<sup>nd</sup> Southern Data Science Conference, Atlanta, USA, Apr. 13-14 2019.

Dalton, A., Zemal, A., Masoumzadeh, A., Bhatia, A., Dorr, B., Mather, B., Hebenstreit, B., Al-Shaer, E., Khoja, E., Castillo, E.J., Bunch, L., Vlahovic, M., Liu, P., Pirolli, P., Shah, R., Cartacio, S., Shaikh, S., **Santhanam S**., Dhaduvai, S., Strzalkowski, T., Karimi, Y., "Modeling Social Engineering Risk using Attitudes, Actions, and Intentions Reflected in Language Use", in 32<sup>nd</sup> International FLAIRS Conference, Florida, USA, May. 19-22 2019. [Alphabetical Ordering]

**Santhanam S**., Shaikh, S., "Propaganda or Clickbait? Understanding and Classifying Types of Misinformation using Recurrent Neural Networks", in 1<sup>st</sup> Southern Data Science Conference, Atlanta, USA, Apr. 13-14 2018.

### **Press Coverage**

**Santhanam S.**, Shaikh, S., "<u>Understanding the emoji of solidarity</u>", in The Conversation, July 16, 2018

### **Research Experience**

# University of North Carolina – Charlotte Ph.D. Candidate

Charlotte, NC

2018 - Present

Conversational Agents

- Creating conversational agents that adapt cognitive architectures using different kinds of memories.
- Building conversational agents that produce emotional messages and engage countermeasures for social engineering and phishing attacks [DARPA Grant]

#### **Human Behavior Modeling**

2017 - Present

- Analysis of Twitter and Gab.com to understand how the online community comes together to express messages of solidarity.
- Cross-platform analysis on Twitter and Gab.com for abusive language through various crisis events.

### **Understanding Decision Making**

2017 - Present

• Evaluating the impact of anchoring and confirmation bias on decision making through visual analytics tasks on misinformation.

#### **Professional Experience**

# Walmart, Global Shared Service Data Analyst

Charlotte, NC

2015 - 2016

- Developed software to help the associates at Walmart to process invoices and other receipts.
- Reduced workload of the associates by auto-matching invoices and the receipts.
- Developed workflows in alteryx and dashboards using Tableau to help in tracking of the backlogs.

# Indian Institute of Technology, Madras Intern

Tamil Nadu, India 2015 – 2016

- Mentor: Dr. Saji K. Matthew
- Implemented a scoring algorithm in R to analyze the emotional variation on Twitter data during sporting events

#### **Awards**

Visual Dialog - Best Project Award Lowell, MA
Conversational International Summer School 2019

Association for Advancement of Artificial Intelligence Stanford, CA Graduate Travel Support 2017 – Present

University of North Carolina – Charlotte

Graduate Assistant Support Plan(GASP)

Charlotte, NC
2017 – Present

#### **Professional Activities**

## 1) Reviewing

- Reviewer of the 2<sup>nd</sup> International Workshop on Emoji Understanding and Applications in Social Media Co-located with The Web Conference 2019.
- Reviewer of NAACL 2019.
- Reviewer of ACL 2019.
- Reviewer of ACM CHI Conference on Human Factors in Computing Systems, 2019.
- Reviewer of WiNLP 2019

#### 2) Invited Lectures

- Natural Language Processing Neural Networks for Natural Language Generation
- Natural Language Processing Machine Translation
- Computation Human Behavior Modeling (ITCS 8050/6050, PSYC-6099) Survey of Natural Language Generation Techniques
- Applied Machine Learning Introduction to Reinforcement Learning