Sudipta Kar

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1300 Smither Drive #10203, Huntsville, TX

Areas of Research Interest Natural Language Processing, Deep Learning, Machine Learning

Experience

Amazon Alexa Applied Scientist Intern Seattle, WA

Jan 2020 - May 2020

◆ Continual Learning for Natural Language Understanding.

❖ GE Healthcare Al/ML Research Intern San Ramon, CA

May 2019 - Aug 2019

◆ Multi-modal information extraction from clinical data.

❖ Intel Al Deep Learning Engineering Intern San Diego, CA

May 2018 - Aug 2018

♦ Sentiment analysis of short texts and aspect based sentiment analysis using deep learning.

University of Houston Research & Teaching Assistant

Aug 2015 - Jan 2020

♦ Research on high-level story analysis and characterization.

♦ Stylistic analysis of literary texts (books). Collaboration with Booxby.com.

Finding relevant questions and answers in community question answering systems.

♦ Sentiment Analysis on Financial data.

◆ TA: Introduction to Automata and Computability, Software Engineering.

❖ CRTC, CSE-SUST Researcher and Developer Sylhet, Bangladesh

Jul 2013 - Jul 2015

◆ Pipilika Top News: Automatic breaking and similar news detector. Live at http://news.pipilika.com

♦ Basic NLP tools like POS tagger, keyword extractor, stemmer for Bengali.

♦ Bengali Spell Cheking game Shobdokolpodroom.

Webcraft Bangladesh Ltd Part-time Game Developer

Jan 2012- Jun 2012

♦ Cool Match Madness: Cross-platform mobile game for iOS, Android, and Nexus.

Education

University of Houston Ph.D. in Computer Science

Aug 2015 - May 2020

◆ Advisor: Dr. Thamar Solorio

◆ Thesis: Automatic Characterization of Stories.

Shahjalal University of Science and Technology B.Sc. in Computer Science

Jan 2009 - May 2013

◆ Thesis: Clustering Bengali News Documents.

Publications

Google Scholar https://scholar.google.com/citations?user=X78c14cAAAAJ&hl=en

- 1. Gustavo Aguilar, Sudipta Kar and Thamar Solorio. LinCE: A Centralized Benchmark for Linguistic Code-switching Evaluation (LREC, 2020).
- 2. Md. Zobaer Hossain, Md Ashraful Rahman, Md Saiful Islam and Sudipta Kar. BanFakeNews: A Dataset for Detecting Fake News in Bangla (LREC, 2020).
- 3. Mahsa Shafei, Niloofar Safi Samghabadi, Sudipta Kar and Thamar Solorio. Age Suitability Rating: Predicting the MPAA Rating Based on Movie Dialogues (LREC, 2020).
- 4. Sudipta Kar, Gustavo Aguilar and Thamar Solorio. Multi-view Characterization of Stories from Narratives and Reviews using Multi-label Ranking. (Preprint 2019)
- 5. Niloofar Safi Samghabadi, Afsheen Hatami, Mahsa Shafaei, **Sudipta Kar** and Thamar Solorio. **Attending the Emotions to Detect Online Abusive Language.** (Preprint 2019)
- 6. Sudipta Kar, Hsi-Ming Chang, Ratna Saripalli, Gopal B. Avinash. Multimodal Identification of Medical Conditions from Chest X-ray Images and Radiology Reports. (GE Data Science Symposium, Milwaukee, USA).
- 7. Sudipta Kar, Suraj Maharjan and Thamar Solorio. Folksonomication: Predicting Tags for Movies from Plot Synopses using Emotion Flow encoded Neural Network. (COLING 2018).

- 8. Niloofar Safi Samghabadi, Deepthi Mave, Sudipta Kar and Thamar Solorio. RiTUAL-UH at TRAC 2018 Shared Task: Aggression Identification. (TRAC @ COLING 2018).
- 9. Suraj Maharjan, Sudipta Kar, Manuel Montes-y-Gómez, Fabio A. González, and Thamar Solorio. Letting emotions flow: Success prediction by modeling the flow of emotions in books. (NAACL 2018).
- 10. **Sudipta Kar**; Suraj Maharjan; A. Pastor López-Monroy and Thamar Solorio. **MPST: A Corpus of Movie Plot Synopses with Tags.** (LREC 2018).
- 11. Sudipta Kar; Suraj Maharjan; Thamar Solorio. RiTUAL-UH at SemEval-2017 Task 5: Sentiment Analysis on Financial Data Using Neural Networks. (SemEval@ACL 2017).
- 12. Marc Franko-Salvador; Sudipta Kar; Thamar Solorio; Paolo Rosso. UH-PRHLT at SemEval-2016 Task 3: Combining Lexical and Semantic-based Features for Community Question Answering. (SemEval@NAACL 2016).

Patent

1. Book Analysis and Recommendation US Potent US20200097538A1.

Professional Services

- Co-organizer: SemEval 2020 Task 9: SentiMix: Sentiment Analysis for Code-Mixed Social Media Text.
- Student Co-chair of NAACL' 2019 Student Research Workshop (SRW).
- Reviewer: ACL, AAAI, EMNLP, SemEval, ACL SRW, ICON, LREV.

Invited Talks

- 1. 'Story of NLP' @ Al Geekfest, GE Healthcare, July 2019
- 2. Hot Topics in Department, NSM-UH, November 2018
- 3. Focus on Research, Dept. of Computer Science, UH, November 2018
- 4. Bengali.ai, October 2018
- 5. Guest lecture for COSC 6336 (Natural Language Processing), UH, April 2018

Technical Skills

Operating Systems: Mac OS X, Ubuntu, Windows

 $\textbf{Languages}: \ \textbf{Python, Java, C/C++, R, PHP, Javascript, SQL, Lua, Scala, \ \underline{\textbf{LT}} \underline{\textbf{EX}}.$

Libraries and Tools: Scikit-learn, Keras, Pytorch, NLTK, Weka, CoreNLP, Gensim, Jupyter, Pandas.

Media Coverage

• Featured in KHOU 11 News, December 2018.

https://www.youtube.com/watch?v=Ks9DxJ3t6_M

• Featured in Graduate Student Achievement, November 2018.

http://www.uh.edu/nsm/news-events/stories/2018/1116-perfect-movie.php

Interviewed on Jamuna TV for works in Pipilika Bengali Search Engine, June 2014.

https://www.youtube.com/watch?v=2ynvf7_5DPc

Achievements and Extra Curricular Activities

- Best PhD Student Award' 2019.
- Recipient of Cullen Travel Grant to attend LREC'2018.
- 1st place in SemEval'2016 Task 3 (Community Question Answering)
- 2nd place in SemEval'2017 Task 5 (Fine-Grained Sentiment Analysis on Financial Microblogs and News)
- 4th Place in National Collegiate Software Contest' 2011, Sylhet, Bangladesh
- Cultural Secretary of Bangladeshi Student Association at UH (2019-2020).
- Participated in National Collegiate Programming Contest' 2010, Sylhet, Bangladesh
- Solved around 150 problems in UVA Online Judge.
- Participated in CITI Financial IT Case Competition' 2011.
- Served as Elected General Secretary of CSE Society, SUST from November'2011 to February'2013.
- Worked as Executive Comity Member from May'2010 May'2011 and Office Secretary from May'2011 October'2012 in NONGAR (A Musical Organization in SUST)