Sunil Sahu

Bio Data



Education

- 2013-Present **Pursuing PhD**, Department of Computer Science and Engineering, Indian Institute of Technology Guwahati, Assam, India.
 - 2011–2013 **M Tech (Computer Science)**, School of Computer and Information Science, University of Hyderabad, Hyderabad, Andhra Pradesh, India.
 - 2005–2009 **BE (Computer Science and Engineering)**, Department of Computer Science and Engineering, Guru Ghasidash Vishvvidyalay Bilaspur, Chhattisgarh, India.

Research Interests

Natural Language Processing, Data Mining, Machine Learning, Deep Learning.

Professional Experiences

- July-Oct.2016 Research Internship, Graph and Text Analytics Group, Xerox Research Center India, Bangalore, Karnataka, India, Project: Phrase embedding for biomedical text using deep learning techniques.
- Feb-Apr.2016 Research Internship, Text Mining and Analitics Group, GVKBioscience Private Limited, Hyderabad, Telangana, India, Project: Relation extraction from clinical texts using domain invariant convolutional neural network.

Teaching Experiences

- 2016 Intelligent Systems and Interfaces, Teaching Assistant, IIT Guwahati.
- 2015 Operating System and Lab, Teaching Assistant, IIT Guwahati.
- 2014 **Programming Language**, *Teaching Assistant*, IIT Guwahati.
- 2013 Natural Language Processing, Teaching Assistant, University of Hyderabad.
- 2012 Data Mining, Teaching Assistant, University of Hyderabad.

Technical Skills

Python, C, C++, Java, tensorflow, theano, scikit-learn, NLTK, CoreNLP, OpenNLP, MySQL, BANNER, LingPipe, UMLS, Metamap.

Scholarships/Grants

- 6-12 Aug 2016 Selected for the grant to attend ACL-2016 Conference from Google Research, Microsoft Research India and ACM-India/IARCS .
 - 2013-17 MHRD fellowship to do PhD.

Recent Works (Published and Submitted)

- Submitted What matters in a transferable neural network model for relation classification in the biomedical domain?, Sunil Kumar Sahu, Ashish Anand, EMNLP-2017.
- Accepted Learning local and global contexts using a convolutional recurrent network model for relation classification in biomedical text, Desh Raj, Sunil Kumar Sahu, Ashish Anand, CoNLL-2017.
- Accepted **Biomedical Event Trigger Identification Using Recurrent Neural Network**, *Rahul PVS*, *Sunil Kumar Sahu*, *Ashish Anand*, **BioNLP at ACL-2017**.
- Under review Drug Drug Interaction Extraction from Biomedical Text Using Long Short Term Memory Network, Sunil Kumar Sahu, Ashish Anand, Journal of Biomedical Informatics, https://arxiv.org/abs/1701.08303.
 - 2016 Relation extraction from clinical texts using domain invariant convolutional neural network, Sunil Kumar Sahu, Ashish Anand, Krishna Dev Orungati, Mahanandeeshwar Gattu, BioNLP at ACL-2016, Berlin, Germany, https://aclweb.org/anthology/W/W16/W16-2928.pdf.
 - 2016 Recurrent neural network models for disease name recognition using domain invariant features, Sunil Kumar Sahu, Ashish Anand, ACL-2016, Berlin, Germany, http://aclweb.org/anthology/P/P16/P16-1209.pdf.
 - 2016 Predicting online doctor ratings from user reviews using convolutional neural networks, Ranti Dev Sharma, Samarth Tripathi, Sunil Kumar Sahu, Sudhanshu Mittal and Ashish Anand, ICMLC-2016, Osaka, Japan, http://www.ijmlc.org/vol6/590-L017.pdf.
 - Evaluation of distributed word representation for capturing semantics of biomedical text, Muneeb Th, Sunil Kumar Sahu, Ashish Anand, BioNLP at ACL-2015, https://aclweb.org/anthology/W/W15/W15-3820.pdf.

Unpublished Works

- 2016 Disease synonyms extraction from biomedical corpora using different Word Embedding techniques.
- 2015 Biomedical entity recognition in PubMed articles through character level word embedding and Recurrent Neural Network (RNN) .
- 2014 Named entity recognition in tweets through Conditional Random Field (CRF) .
- 2014 Object recognition in images through deep Convolutional Neural Network (CNN) .
- 2014 Parts of speech tagging in English language text through Hidden Markov Model (HMM) .
- 2013 Digit recognition system in speech signal by Hidden Markov Model (HMM) .
- 2013 Spam mail detection through Support Vector Machine (SVM).
- 2013 Digit recognition in hand written images through Multi Layer Perceptron (MLP).
- 2013 Language identification system for small (ISCII coded) text corpus through different linear non-linear classifier.

Conference/Workshop/Summer School Participations:

2016 ACL-2016, Humboldt University, Berlin, Germany, August 7-12, Thanks to Google Research India, Microsoft Research India and ACM-India/IARCS for entire traveling and other expenses support.

- 2015 **ACL-2015**, *China National Convention Center Beijing, China*, July 30 to Aug 1, Thanks to IIT Guwahati for entire traveling and other expenses support.
- 2015 **Summer School on Machine Learning**, *Microsoft Research and IISc Bangalore* (*Karnataka*), 15 June to 26 June, Thanks to Microsoft Research India for entire traveling and other expenses support.
- 2015 Information and Communication Technology in Healthcare: Challenges and Promises, *IIT Guwahati (Assam)*, 25 March.
- 2014 National Workshop on GPU Programming and Application, *IIT Guwahati (Assam)*, 12 Sep to 14 Sep.
- 2008 Information Security: Practice and Challenges, ITGGU Bilaspur (CG), 9 Feb to 10 Feb.

Languages

First **Hindi**.

Second English.

Personal

Full Name Sunil Kumar Sahu.

Other Interest Athletics, Swimming.

References

Dr. Ashish Anand, *Assistant Professor*, Department of Computer Science and Engineering, **IIT Guwahati**, email id: anand.ashish@iitg.ernet.in.

Dr. Sandya Mannarswamy, *Research Scientist*, **Xerox Research Center Bangalore**, email id: sandya.mannarswamy@xerox.com .

Prof. K Narayana Murthy, *Professor*, School of Computer and Information Science University of Hyderabad, email id: knmuh@yahoo.com.