Soujanya Poria

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Education

Feb 2014 - present	**Stirling University, Stirling, Scotland, UK** PhD student in Computer Science and Mathematics Thesis: Enhancing Multimodal Sentiment and Emotion Detection Performance Using Novel Textual Analysis
May 2009 – May 2013	**Jadavpur University, Kolkata, India** Bachelor's Degree in Computer Science and Engineering

Experience

Jul 2015 – present

Research Assistant
Temasek Lab, Nanyang Techological University, Singapore.
Duties: *Design and development of complex NLP algorithms, developing state-of-the-art sentiment and emotion detection tools for Singapore local language.*

Jan 2014 – Jun 2015

Project Officer
School of Computer Engineering, Nanyang Technological University, Singapore.
Duties: *Design and development of concept-level opinion mining software for English.*

Aug 2013 – Dec 2014

Project Officer
Electrical and Electronics Engineering, Nanyang Technological University, Singapore.
Duties: *Design and development of sentiment analysis software for English using advanced Machine Learning and Sentic Computing.*

July 2013 – Aug 2013

Research Intern
Temasek Laboratory, National University of Singapore, Singapore.
Duties: *Development of opinion mining and emotion detection prototype for English.*

Awards and Achievements

Feb 2016	*Brain Science Foundation, USA – Research Fellowship Award*
Jul 2015	***Invited paper**, Journal Track, IJCAI 2015, Buenos Aires, Argentina*
Apr 2015	*Honorary Member of the NDS lab, Oxford University*
May 2014	***First place** award for the best performing system for semantic parsing at the SemWebEval Concept-Level Sentiment Analysis Challenge at ESWC 2014*
Aug 2014	***Invited paper**, SocialNLP at COLING 2014, Dublin, Ireland*
Feb 2014	*Stirling University – IMPACT International Research Scholarship Award*
Feb 2014	*Behavioral Media Networks, USA – Research Fellowship Award*
Dec 2013	*Jadavpur University – Tata Consultancy Best Undergraduate Software Project Award:* ***gold plated silver medal***
Jan 2013	*Honorary Member of the Brain Science Foundation, MA, USA*
Nov 2012	***Best student paper**, MICAI 2012, out of 224 submissions from 28 countries*

Reviewer of Journals/Conferences

Journals	Knowledge Based Systems, IEEE Intelligent Systems, Elsevier Information and Management, IEEE Transaction on Affective Computing, Information Processing & Management, Cognitive Computation, SciTechnol, International Journal of Computational Linguistics and Applications, Research in Computing Science, Polibits, Computación y Sistemas
Conferences	CICLing, ICDM, KDD, FLAIRS, LATA

Program Committee of Conferences

FLAIRS 2015, 2016.

Research Visit

- Infosys AI Lab, Pune.
- Computational Neuroscience Lab, University of Oxford.

Active Collaborations

- Synthetic Intelligence Lab, MIT Media Lab
- NDS Lab, Oxford University, UK
- NLP Lab, CIC, IPN, Mexico
- Microsoft Research, China
- NLP Lab, Tsinghua University, China
- Infosys AI Lab, Pune, India

Technical Skills

Proficient in Python, Java, Theano
Can also use Matlab, LaTeX, Photoshop

Languages and Interests

Fluent in Bengali (native), Hindi (100% speaking) and English (100% speaking and writing)

Enjoy traveling, photography, friends, and theme parks

Publications

Google Scholar	Citations: 1011, h-index: 20
Scopus	Citations: 311, h-index: 10

Journal Papers

1. S. Poria, H. Peng, E. Cambria, A. Hussain, N. Howard. Ensemble Application of Convolutional Neural Networks and Multiple Kernel Learning for Multimodal Sentiment Analysis **Neurocomputing** (2016).
2. Dashtipour, K., Poria, S., Hussain, A., Cambria, E., Hawalah, A.Y., Gelbukh, A. and Zhou, Q., Multilingual Sentiment Analysis: State of the Art and Independent Comparison of Techniques. **Cognitive Computation**, pp.1-15, (2016).
3. S. Poria, E. Cambria and Gelbukh, A., Aspect extraction for opinion mining with a deep convolutional neural network. **Knowledge-Based Systems**, 108, pp.42-49, (2016).
4. S. Poria, A. Hussain, E. Cambria. Fusing Audio, Visual and Textual Clues for Big Social Data Analysis. **Neurocomputing** (2016).
5. N. Ofek, S. Poria, L. Rokach, E. Cambria, A. Hussain, A. Shabtai. Unsupervised Commonsense Knowledge Enrichment for Domain-Specific Sentiment Analysis. **Springer Cognitive Computation**, in press (2016).
6. S. Poria, E. Cambria, F. Bisio, A. Gelbukh, A. Hussain. Sentiment Data Flow Analysis by Means of Dynamic Linguistic Patterns for Concept-Based Opinion Mining. **IEEE Computational Intelligence Magazine**, in press (2015).
7. S. Poria, E. Cambria, A. Hussain, G.-B. Huang. Towards an Intelligent Framework for Multimodal Affective Data Analysis. **Neural Networks** (2015).
8. B. Agarwal, **S. Poria**, E. Cambria, N. Mittal, A. Gelbukh, A. Hussain. Concept Level Sentiment Analysis using Dependency-based Semantic Parsing. **Cognitive Computation** (2015).
9. S. Poria, A. Gelbukh, E. Cambria, A. Hussain, G.-B. Huang. EmoSenticSpace: A Novel Framework for Affective Common-sense Reasoning. **Knowledge-Based Systems**, Special Issue on Big Data for Social Analysis (2014).
10. S. Poria, E. Cambria, G. Winterstein, G.-B. Huang. Sentic patterns: Dependency-based Rules for Concept-level Sentiment Analysis. **Knowledge-Based Systems**, Special Issue on Big Data for Social Analysis (2014).
11. S. Poria, A. Gelbukh, A. Hussain, D. Das, S. Bandopadhyay. Enhanced SenticNet with Affective Labels for Concept-based Opinion Mining. **IEEE Intelligent Systems**, ISSN 15411672, 2013.
12. P. Pakray, S. Poria, A. Gelbukh, S. Bandyopadhyay. Semantic Textual Entailment Recognition using UNL. **Polibits**, Special Issue on Computational Linguistics and Intelligent Text Processing (2011).

Book Chapter

13. E. Cambria, M. Grassi, S. Poria, A. Hussain. Sentic Computing for Social Media Analysis, Representation, and Retrieval. Book chapter. In: **Social Media Retrieval**. Network and Communication book series, **Springer**, ISBN 978-1-4471-4555-4, 2013.

Conference Papers

14. S. Poria, E. Cambria, D. Hazarika, and P. Vij. A deeper look into sarcastic tweets using deep convolutional neural networks. In: **COLING**, Osaka (2016)
15. S. Poria, I. Chaturvedi, E. Cambria, and A. Hussain. Convolutional MKL based multimodal emotion recognition and sentiment analysis. In: **ICDM**, Barcelona (2016)
16. E. Cambria, S. Poria, R. Bajpai, and B. Schuller. SenticNet 4: A semantic resource for sentiment analysis based on conceptual primitives. In: **COLING**, Osaka (2016)
17. S. Poria, I. Chaturvedi, E. Cambria, and F. Bisio. Sentic LDA: Improving on LDA with semantic similarity for aspect-based sentiment analysis. In: **IJCNN 2016**, Vancouver.
18. S. Poria, E. Cambria, and A. Gelbukh. Deep Convolutional Neural Network Textual Features and Multiple Kernel Learning for Utterance-Level Multimodal Sentiment Analysis. **EMNLP 2015**. Lisbon, Portugal.
19. E. Cambria, J. Fu, F. Bisio, and S. Poria. AffectiveSpace 2: Enabling affective intuition for concept level sentiment analysis. **AAAI 2015**. Austin, USA.
20. P. Chikersal, S. Poria, E. Cambria, A. Gelbukh, C. E. Siong. Modelling Public Sentiment in Twitter: Using Linguistic Patterns to Enhance Supervised Learning. **CICLing 2015**, Cairo, Egypt. **Springer LNCS**.
21. E. Cambria, S. Poria, F. Bisio, R. Bajpai and I. Chaturvedi. The CLSA Model: A Novel Framework for Concept-Level Sentiment Analysis. **CICLing 2015**, Cairo, Egypt. **Springer LNCS**.
22. S. Poria, B. Agarwal, A. Gelbukh, A. Hussain, N. Howard. Dependency-based Semantic Parsing for Concept-level Text Analysis. **CICLing 2014**, Kathmandu, Nepal. **Springer LNCS**.
23. E. Cambria, S. Poria, A. Gelbukh, K. Kwok. A Common-Sense Based API for ConceptLevel Sentiment Analysis. **WWW 2014**, Making Sense of Microposts Microposts. Seoul, Korea
24. S. Poria, E. Cambria, L.-W. Ku, C. Gui, A. Gelbukh. A Rule-Based Approach to Aspect Extraction from Product Reviews. **SocialNLP** at **COLING 2014**, Dublin, Ireland, **invited paper**.
25. S. Poria, N. Ofek, A. Gelbukh, A. Hussain, L. Rokach. Dependency Tree-based Rules for Concept-Level Aspect-based Sentiment Analysis. **SemWebEval 2014** at **ESWC 2014**, Crete, Grece, **Springer CCIS**.
26. S. Minhas, S. Poria, A. Hussain, K. Hussainey. A Review of Artificial Intelligence and Biologically Inspired Computational Approaches to Solving Issues in Narrative Financial Disclosure. **BICS 2013**, Beijing, China, **Springer LNAI**.
27. S. Poria, A. Gelbukh, B. Agarwal, E. Cambria, N Howard. Common sense knowledge based personality recognition from text. **MICAI 2013**, Mexico City, Mexico, **Springer LNAI**.
28. S. Poria, A. Gelbukh, A. Hussain, S. Bandyopadhyay and N. Howard. Music genre classification: A semi-supervised approach. **MICAI 2013**, Mexico City, Mexico, **Springer LNAI**.
29. S. Poria, A. Gelbukh, D. Das, S. Bandyopadhyay. Fuzzy Clustering for Semi-Supervised Learning—Case study: Construction of an Emotion Lexicon. **MICAI 2012**. Mexico City, Mexico, **Springer LNCS**. **Best student paper award**.
30. S. Poria, A. Gelbukh, E. Cambria, D. Das, S. Bandyopadhyay. Enriching SenticNet Polarity Scores through Semi-Supervised Fuzzy Clustering. **SENTIRE 2012** at **IEEE ICDMW 2012**. Belgium.
31. P. Pakray, S. Pal, S. Poria, S. Bandyopadhyay, A. Gelbukh. SMSFR: SMS-Based FAQ Retrieval System. **MICAI 2012**. Mexico City, Mexico, **Springer LNCS**.
32. S. Poria, A. Gelbukh, E. Cambria, A. Hussain, T. Durrani. Merging Senticnet And WordnetAffect Emotion Lists For Sentiment Analysis. **IEEE ICSP 2012**. China.
33. D. Das, S. Poria, S. Bandopadhyay. A Classifier Based Approach of Emotion Lexicon Generation, **NLDB 2012**, The Netherlands, **Springer LNCS**.
34. D. Das, S. Poria, S. Bandopadhyay. Building Resources for Multilingual Affect Analysis, A Case Study on Hindi, Bengali and Telugu. **ES3** at **LREC 2012**. Turkey.
35. P. Pakray, S. Pal, S. Poria, S. Bandyopadhyay. JU_CSE_TAC: Textual Entailment Recognition System at TAC RTE-7. System report. Recognizing Textual Entailment Track (TAC RTE) at **TAC 2011**, Text Analysis Conference. USA.
36. P. Pakray, S. Pal, S. Poria, S. Bandyopadhyay. JU_CSE_TAC: Textual Entailment Recognition System at TAC RTE-6. System report. Recognizing Textual Entailment Track (TAC RTE) at **TAC 2010**, Text Analysis Conference. USA.