

# Devamanyu HAZARIKA

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## BRIEF INTRODUCTION

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I am a fourth-year Computer Science PhD candidate at National University of Singapore, advised by [Dr. Roger Zimmermann](#) and [Dr. Soujanya Poria](#).

I am supported by the President's Graduate Fellowship and affiliated with [Media Management Research Lab](#) and [Deep Cognition and Language Research Lab](#).

## RESEARCH INTERESTS

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Broad Interests	Natural Language Processing, Multimodal Machine Learning, Domain Adaptation
Applications	Dialogue Systems, Affective Computing, Sarcasm Analysis.

## EDUCATION

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CURRENT 2017-	<b>National University of Singapore</b> Ph.D. Candidate in Computer Science Advisor: Roger Zimmermann	GPA: 4.75/5
2013-2017	<b>National Institute of Technology, Warangal</b> B.Tech. in Computer Science and Engineering Thesis: "Benchmarking Multimodal Sentiment Analysis" Advisor: RBV Subramaanyam	GPA: 9.56/10 Gold Medal

## RESEARCH INTERNSHIPS

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SEPT- 2020 (ongoing)	Amazon Alexa AI, Sunnyvale USA <i>Applied Scientist II, Intern</i> Dialogue Systems Mentored by: Mahdi Namazifar, Dilek Hakkani-Tur
MAY-JUL 2019 2016	Nanyang Technological University, Singapore <i>Research Assistant</i> Emotion Recognition in Conversations, Sarcasm Analysis using CNNs Advised by: Soujanya Poria, Erik Cambria

## HONORS AND AWARDS

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2021	IEEE CIM Outstanding Paper Award
2019-2021	President's Graduate Fellowship, National University of Singapore
2019	Research Achievement Award, School of Computing, NUS
2017-2019	NUS Research Scholarship, National University of Singapore
2017	Department Gold Medal (Computer Science), NIT, Warangal
2015	Summer Research Fellow, Indian Academy of Sciences
2014	Alumni's Gold Medal for Scholastic Excellence, NIT, Warangal

## TEACHING

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2019-2020	CS 3243: Intro to Artificial Intelligence
2018-19	CS 2113: Software Engineering
2017-18	

## ACADEMIC PUBLICATIONS

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### Pre-prints

2021	<i>Recognizing Emotion Cause in Conversations</i> , S Poria, N Majumder, <b>Devamanyu Hazarika</b> , D Ghosal, R Bhardwaj, S Jian, R Ghosh, N Chhaya, A Gelbukh, and R Mihalcea
	<i>Domain Divergences: a Survey and Empirical Analysis</i> , AR Kashyap, <b>Devamanyu Hazarika</b> , MY Kan, and R Zimmermann

### Conferences

2021	<i>Domain Divergences: a Survey and Empirical Analysis</i> , AR Kashyap, <b>Devamanyu Hazarika</b> , Min-Yen Kan, and R Zimmermann, <a href="#">NAACL 2021</a>
2020	<i>MISA: Modality-Invariant and -Specific Representations for Multimodal Sentiment Analysis</i> , <b>Devamanyu Hazarika</b> , R Zimmermann, and S Poria, <a href="#">ACM MM 2020</a>
	<i>Methods for Numeracy-Preserving Word Embeddings</i> , D Sundararaman, S Si, V Subramanian, G Wang, <b>Devamanyu Hazarika</b> , and L Carin, <a href="#">EMNLP 2020</a>
	<i>KinGDOM: Knowledge-Guided DOMain adaptation for sentiment analysis</i> , D Ghosal, <b>Devamanyu Hazarika</b> , N Majumder, A Roy, S Poria, and R Mihalcea, <a href="#">ACL 2020</a>
2019	<i>Towards Multimodal Sarcasm Detection (An Obviously Perfect Paper)</i> , S Castro, <b>Devamanyu Hazarika</b> , V Pérez-Rosas, R Zimmermann, R Mihalcea, and S Poria, <a href="#">ACL 2019</a>
	<i>MELD: A Multimodal Multi-Party Dataset for Emotion Recognition in Conversations</i> , S Poria, <b>Devamanyu Hazarika</b> , N Mazumder, G Naik, E Cambria, and R Mihalcea, <a href="#">ACL 2019</a>
	<i>DialogueRNN: An Attentive RNN for Emotion Detection in Conversations</i> , N Mazumder, S Poria, <b>Devamanyu Hazarika</b> , R Mihalcea, A Gelbukh, and E Cambria, <a href="#">AAAI 2019</a>

- 2018 *ICON: Interactive Conversational Memory Network for Multimodal Emotion Detection*, Devamanyu Hazarika, S Poria, R Mihalcea, E Cambria, and R Zimmermann, [EMNLP 2018](#)
- CASCADE: Contextual Sarcasm Detection in Online Discussion Forums*, Devamanyu Hazarika, S Poria, S Gorantla, E Cambria, R Zimmermann, and R Mihalcea, [COLING 2018](#)
- CMN: Conversational Memory Network for Emotion Recognition in Dyadic Dialogue Videos*, Devamanyu Hazarika, S Poria, A Zadeh, E Cambria, L.P. Morency, and R Zimmermann, [NAACL 2018](#)
- Modeling Inter-Aspect Dependencies for Aspect-Based Sentiment Analysis*, Devamanyu Hazarika, S Poria, P Vij, G Krishnamurthy, E Cambria, and R Zimmermann, [NAACL 2018](#)
- SenticNet 5: Discovering conceptual primitives for sentiment analysis by means of context embeddings*, E Cambria, S Poria, Devamanyu Hazarika, and K Kwok, [AAAI 2018](#)
- Multi-level multiple attentions for context-aware multimodal sentiment analysis*, S Poria, E Cambria, Devamanyu Hazarika, N Mazumder, A Zadeh, and L.P. Morency, [ICDM 2017](#)
- Context-dependent sentiment analysis in user-generated videos*, S Poria, E Cambria, Devamanyu Hazarika, N Mazumder, A Zadeh, and L.P. Morency, [ACL 2017](#)
- A Deeper Look into Sarcastic Tweets using Deep Convolutional Neural Networks*, S Poria, E Cambria, Devamanyu Hazarika, and P Vij, [COLING 2016](#)

#### Journals

- 2020 *Conversational Transfer Learning for Emotion Recognition*, Devamanyu Hazarika, S Poria, R Zimmermann, and R Mihalcea, [INFORMATION FUSION 2020](#)
- 2018 *Recent Trends in Deep Learning Based Natural Language Processing*, T Young, Devamanyu Hazarika, S Poria, and E Cambria, [IEEE COMPUTATIONAL INTELLIGENCE MAGAZINE 2018](#) ([IEEE CIM OUTSTANDING PAPER AWARD](#))
- Multimodal Sentiment Analysis: Addressing Key Issues and Setting up Baselines*, S Poria, N Mazumder, Devamanyu Hazarika, E Cambria, A Hussain, and A Gelbukh, [IEEE INTELLIGENT SYSTEMS 2018](#)
- Multimodal Sentiment Analysis using Hierarchical Fusion with Context Modeling*, N Majumder, Devamanyu Hazarika, A Gelbukh, E Cambria and S Poria, [KNOWLEDGE BASED SYSTEMS 2018](#)

## RESEARCH IMPACT AND COVERAGE

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Bibliometrics	Google Scholar citations: <b>3039</b> ; h-index: <b>16</b> Semantic Scholar citations: <b>2554</b> ; h-index: <b>16</b>
Emotion Analysis	<a href="https://paperswithcode.com/newsletter/2">https://paperswithcode.com/newsletter/2</a>
Deep-learning for NLP	<a href="https://nlpoverview.com">https://nlpoverview.com</a> <a href="https://www.kdnuggets.com/2018/06/detecting-sarcasm-deep-convolutional-neural-networks.html">https://www.kdnuggets.com/2018/06/detecting-sarcasm-deep-convolutional-neural-networks.html</a>
Sarcasm Analysis	<a href="https://www.kdnuggets.com/2018/09/deep-learning-nlp-overview-recent-trends.html">https://www.kdnuggets.com/2018/09/deep-learning-nlp-overview-recent-trends.html</a>

## PROFESSIONAL SERVICES

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Professional Positions	Volunteer Chair, SSNLP 2019 *SEMconference, NAACL 2019
Program Committee Member	ACL 2018, 2019, 2020, 2021 EMNLP 2019, 2020 NAACL 2019, 2021 COLING 2018, 2020 AAAI 2018, 2019, 2020 ACMMM 2019, 2020 ICME 2021
Journal Reviewer	Cognitive Computation, Computational Intelligence Magazine, Information Fusion, Transactions of Affective Computing, Transactions on Audio, Speech and Language Processing

## INTERESTS AND ACTIVITIES

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President	ACM Student Chapter, NIT Warangal 2015-17 Organized several workshops to promote computer science amongst junior students.
Executive Member	Music Club, NIT Warangal Bachelor of Music in Hindustani Classical Music.
Sports	Tennis, National School Games 2007