Nikita Moghe

Natural Language Processing, Dialogue Systems

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Education

University of Edinburgh   2019 -
Ph.D., School of Informatics
Advisors: Alexandra Birch and Mark Steedman

Indian Institute of Technology Madras   2016 - 2019
M.S. (by Research), Computer Science and Engineering   C.G.P.A: 8.8/10
Advisors: Balaraman Ravindran and Mitesh M. Khapra

University of Mumbai   2012 - 2016
B.E., Computer Engineering   C.G.P.A: 9.53/10

Publications / Preprints

○ **MULTI3NLU++: A Multilingual, Multi-Intent, Multi-Domain Dataset for Natural Language Understanding in Task-Oriented Dialogue** [pdf]
Nikita Moghe*, Evgeniia Razumovskaia*, Liane Guillou, Ivan Vulić, Anna Korhonen, Alexandra Birch
In preparation, 2022

○ **Extrinsic Evaluation of Machine Translation Metrics** [pdf]
Nikita Moghe, Tom Sherborne, Mark Steedman, Alexandra Birch
In preparation, 2022

○ **ACES: Translation Accuracy Challenge Sets for Evaluating Machine Translation Metrics** [pdf]
Chantal Amrhein*, Nikita Moghe*, Liane Guillou*
To appear in Seventh Conference on Machine Translation (WMT 2022), EMNLP 2022.
Poster presented at MT Marathon 2022

○ **Cross-lingual Intermediate Finetuning improves Dialogue State Tracking** [pdf] [poster]
Nikita Moghe, Mark Steedman, Alexandra Birch
In proceedings of 2021 Conference on Empirical Methods in Natural Language Processing, EMNLP 2021.

○ **The University of Edinburgh-Uppsala University's Submission to the WMT 2020 Chat Translation Task** [pdf] [video]
Nikita Moghe, Christian Hardmeier, Rachel Bawden
In Proceedings of the Fifth Conference on Machine Translation (WMT 2020), EMNLP 2020.

○ **On Incorporating Structural Information to improve Dialogue Response Generation** [pdf] [video]
Nikita Moghe, Priyesh Vijayan, Balaraman Ravindran, Mitesh M. Khapra
In Proceedings of the 2nd Workshop on Natural Language Processing for Conversational AI, ACL 2020.
Extended abstract presented at EurNLP'19.

○ **Towards Exploiting Background Knowledge for Building Conversation Systems** [pdf] [video]
Nikita Moghe, Siddhartha Arora, Suman Banerjee, Mitesh M. Khapra
In proceedings of 2018 Conference on Empirical Methods in Natural Language Processing, EMNLP 2018.

○ **A Dataset for Building Code-Mixed Goal Oriented Conversation Systems** [pdf]
Suman Banerjee, Nikita Moghe, Siddhartha Arora, Mitesh M. Khapra
In proceedings of COLING 2018, International Committee on Computational Linguistics.

Professional Experience

PolyAI   June 2021 - September 2021
Machine Learning Intern
Collaborators: Ben Levin, Ivan Vulić

○ Improved utterance representation by using conversational paraphrase detection as an intermediate task.

○ Conducted exploratory work on non-parametric few-shot multi-label intent detection.

Robert Bosch Centre for Data Science and AI, IIT Madras   May 2018 - June 2019
Project Associate (Deep Learning for NLP)

Presented ongoing/published work in Web Science Symposium, three RBC-DSAI poster sessions.

Microsoft Research India   June 2017
Participant, Workshop on Artificial Social Intelligence

○ Developed a minimalist conversation strategy to improve user engagement using insights from crowdsourced chats.

○ Improved domain-specific conversations using information from knowledge graphs and case-based response generation.

Achievements

Scholarships
- Nominated by the University of Edinburgh (one of three) for Google PhD Fellowship 2022.
- Nominated by the University of Edinburgh (one of three) for AIML Apple Scholars 2022.
- J.R.D. Tata Scholarship (Full Tuition Fee Waiver) 2013-14, 2014-15.
- Finalist for Narotam Seksaria Foundation's Engineering Excellence Scholarship 2015.

Poster Presentations
- First Position at 4th RBC-DSAI Workshop May 2019. Awarded a travel grant of $250.
- First Position at Grace Hopper Celebration India 2018 (GHCI '18).

Travel Grants
- EurNLP 2019 Travel Grant for poster presenters.
- EMNLP 2018 Student Travel Scholarship.
- Microsoft Research India Student Travel Grant 2018.
- Grace Hopper Celebration India 2018 (GHCI '18) Student Scholarship.

Awards
- Computer Society of India Highest Committed Student Award 2015.
- Infibeam's Most Innovative Project Idea 2015.

Teaching

University of Edinburgh
- Marker, Demonstrator - Natural Language Understanding, Generation, and Machine Translation (Spring 2021, 2022)
- Demonstrator - Accelerated Natural Language Processing (Fall 2020)
- Marker - Doing Research in Natural Language Processing (2020)

Indian Institute of Technology Madras
- Teaching Assistant - Introduction to Machine Learning (Fall 2017)

Service

Organizer
- Workshop on Graphs and more Complex structures for Learning and Reasoning (GCLR) at AAAI-21.
  Moderated the panel on *Learning and Reasoning with Complex graphs - a multi-disciplinary challenge.*
- CDTalks (2021-2022) - a monthly seminar series.

Reviewer
- AAAI (2020,2021), ACL (2020, 2021), ACL Rolling Review (2021-), COLING (2020, 2022), NAACL (2021)
- Workshops: NILLI(2021, 2022), CtrlGEN(2021), NLP4ConvAI(2022)

Public Engagement
- I'm a Scientist Stay at Home - Mentor for Coding Zone, Summer 2020.
- International Women's Day Celebration 2020 - Edinburgh Hoppers.

Mentoring
- Hrichika Nag - MInf Dissertation 2022-2023
- Widening NLP, EMNLP 2021 - Graduate School
- Women in STEM Mentorship, Informatics, 2021-2022

Talks

- Intermediate Fine-tuning improves NLU for dialogue tasks - Alan Turing Institute, 13/05/2022
- Intermediate Fine-tuning improves NLU for dialogue tasks - Huawei (Invited), 07/02/2022
- The Great Intent Detective - Aveni (Invited), 02/11/2021
- The Great Intent Detective - PolyAI, 20/08/2021
- Multilingual Dialogue Systems - CDT Industry Day, 05/02/2021
- HollyChat! Domain Specific Conversational Agents - Microsoft Research India, 29/06/2017