KALPESH KRISHNA

kalpesh@cs.umass.edu ◇ LinkedIn ◇ Github ◇ Twitter ◇ Google Scholar ◇ Semantic Scholar
WEBPAGE: *https://martiansideofthemoon.github.io*

EDUCATION

University of Massachusetts, Amherst   Sept '18 - Present
MS/PhD in Computer Science
(advised by *Prof. Mohit Iyyer*)
Major GPA: 4.0/4.0

Indian Institute of Technology, Bombay   July '14 - July '18
B.Tech in Electrical Engineering, Minor in Computer Science
(advised by *Prof. Preethi Jyothi*)
Major GPA: 9.74/10 (**2nd** *among 66 students*), Minor GPA: 10/10

INTERNSHIPS

Google Research India (upcoming)   June '21 - September '21
Research Intern under Partha Talukdar   Bangalore, India (remote)

Google Brain   May '20 - August '20
Research Intern under Aurko Roy   Mountain View, CA (remote)

Google AI Language   May '19 - September '19
Research Intern under Gaurav Singh Tomar and Ankur Parikh   New York, NY

Toyota Technological Institute at Chicago   May '17 - July '17
Research Intern under Karen Livescu, Liang Lu and Kevin Gimpel   Chicago, IL

Mozilla Foundation   May '16 - August '16
Google Summer of Code Intern under Armen Zambrano   Mumbai, India / London, UK

AWARDS & SCHOLARSHIPS

- **Google PhD Fellowship 2021**

- PhD Candidacy with Distinction at UMass Amherst (Fall 2020)

- Outstanding Reviewer at ACL 2020 (Top 7% reviewers)

- CICS Graduate Fellowship 2018, Victor Lesser Graduate Scholarship 2019 at UMass Amherst

- **Sharad Maloo Memorial Gold Medal** at IIT Bombay Convocation 2018
  (For outstanding academic and extra-curricular achievements)

- **Cargill Global Leaders Scholarship 2016-18**
  (Awarded by the Institute of International Education and Cargill for academic and extra-curricular achievements and leadership potential)

- Institute Organizational Color 2016-17 at IIT Bombay
  (For achievements while leading the Web and Coding Club)

- Institute Academic Prize 2015-16 at IIT Bombay

SELECTED PAPERS

- Hurdles to Progress in Long-form Question Answering
  Kalpesh Krishna, Aurko Roy, Mohit Iyyer
  NAACL 2021

- Reformulating Unsupervised Style Transfer as Paraphrase Generation
  Kalpesh Krishna, John Wieting, Mohit Iyyer
  EMNLP 2020

- Thieves on Sesame Street! Model Extraction of BERT-based APIs
  Kalpesh Krishna, Gaurav S. Tomar, Ankur P. Parikh, Nicolas Papernot, Mohit Iyyer
  ICLR 2020

- Generating Question-Answer Hierarchies
  Kalpesh Krishna, Mohit Iyyer
  ACL 2019

OTHER PAPERS

- Weakly-Supervised Open-Retrieval Conversational Question Answering
  Chen Qu, Liu Yang, Cen Chen, W. Bruce Croft, *Kalpesh Krishna* and Mohit Iyyer
  ECIR 2021

- An Analysis of Frame-skipping in Reinforcement Learning
  Shivaram Kalyanakrishnan, Siddharth Aravindan, Vishwajeet Bagdawat, Varun Bhatt, Harshith Goka, Archit Gupta, *Kalpesh Krishna*, Vihari Piratla
  arXiv 2021

- Long Document Summarization in a Low Resource Setting using Pretrained Language Models
  Ahsaas Bajaj, Pavitra Dangati, *Kalpesh Krishna*, Pradhiksha Kumar, Rheeya Uppaal, Bradford Windsor, Eliot Brenner, Dominic Dotterrer, Rajarshi Das, Andrew McCallum
  arXiv 2021

- SunPy: A Python package for Solar Physics
  Stuart J. Mumford and *others*
  JOSS 2020

- Syntactically Supervised Transformers for Faster Neural Machine Translation
  Nader Akoury, *Kalpesh Krishna*, Mohit Iyyer
  ACL 2019

- Trick or TReAT: Thematic Reinforcement for Artistic Typography
  Purva Tendulkar, *Kalpesh Krishna*, Ramprasaath R. Selvaraju, Devi Parikh
  ICCC 2019 (*Best Presentation Award*)

- Revisiting the Importance of Encoding Logic Rules in Sentiment Classification
  Kalpesh Krishna, Preethi Jyothi, Mohit Iyyer
  EMNLP 2018 (*oral presentation*, *short paper*)

- Hierarchical Multitask Learning for CTC-based Speech Recognition
  Kalpesh Krishna, Shubham Toshniwal, Karen Livescu
  arXiv 2018

- [A Study of All-Convolutional Encoders for Connectionist Temporal Classification](#)
  Kalpesh Krishna, Liang Lu, Kevin Gimpel, Karen Livescu
  ICASSP 2018 (*Awarded SPS Travel Grant*)

INVITED TALKS

- IBM Research, April 2020
  (On model extraction attacks on BERT-based APIs)

- AllenNLP Summit at AI2, August 2019
  (Lightning talks on using AllenNLP for education)

- UMass Data Science Research Symposium, April 2019
  (On hierarchical question-answer generation)

- IIT Bombay Computer Science Cybersecurity Club Seminar, April 2018
  (On adversarial examples for machine learning)

- IIT Bombay BioBytes Seminar, February 2018
  (On end-to-end speech recognition)

- IIT Bombay Web and Coding Club Reflections Seminar, February 2018
  (On end-to-end speech recognition)

RESPONSIBILITIES

- **Co-organizing** a weekly talk series "Machine Learning and Friends Lunch" at UMass Amherst

- **Mentoring** three UMass undergraduates on their honors thesis (2019-) and student teams for the industrial mentorship projects (COMPSCI 696) in Spring 2019, 2020, 2021

- **Graduate Teaching Assistant** at UMass Amherst for *Deep Learning for NLP* (Spring 2019) and *Advanced Natural Language Processing* (Fall 2020)

- **Institute Student Mentor** at IIT Bombay (2017-18)

- **Manager, Web and Coding Club** at IIT Bombay (2016-17)

- **Teaching Assistant** at IIT Bombay in *Computer Programming* (2016) and *Linear Algebra* (2017)

- **Web Coordinator** for Mood Indigo 2016 at IIT Bombay

ACADEMIC SERVICE

- **Program Committee / Reviewer** for IJCV '19, EMNLP '19, '20; ACL '20, '21; ICLR '21; NAACL '21 and several other workshops

- **Secondary Reviewer** for ACL '19, NAACL '19, ICLR '19

- **Student Volunteer** at ACL '19, ICLR '20. Also awarded the ACL 2019 Student Scholarship

OTHER ACHIEVEMENTS

- Selected for JSALT '17, organized by JHU's Center for Language and Speech Processing[2]

- **Top 10** at the Astronomy Olympiad's Indian Selection Camp for IOAA '14, (*20000 candidates*)

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[2]Couldn't attend due to clashing college schedule

- All India Rank 93 in JEE Advanced '14 *(out of 126,000 candidates)*
  All India Rank 34 in JEE Mains '14 *(out of 1,400,000 candidates)*
  All India Top 100 in CBSE XII '14 *(out of 1,000,000 candidates)*
  All India Rank 2 in ICSE '12 *(out of 132,000 candidates)*
  Awarded by Pune city institutions for being the city topper in each of these exams. Featured in the Pune city editions of several newspapers including The Times of India and The Indian Express.

- Passed the National Standard Exam in Physics '14 and National Standard Exam in Chemistry '14, the first rounds in the Indian selection procedure for the International Physics Olympiad and the International Chemistry Olympiad respectively

- Selected for the Kishore Vaigyanik Protsahan Yojana (KVPY) Award '14 (1,000/20,000 applicants)

EXTRA-CURRICULAR

- **Blogging** - Active blogger on MS/PhD applications, biking, bird photography and computer science

- Led the development of a beginner's programming wiki with the Web and Coding Club, IIT Bombay

- **StackOverflow** - Active contributor in 2016-17, top 7% overall

- **Open Source** - Actively contributed to Mozilla in 2015-16 including QoC 2015, GSoC 2016

- **Karate** - Black Belt (1st Dan) trained in Kyokushin Kai for seven years, district level winner

- **Abacus & Mental Arithmetic** - Aloha grandmaster, national and state level winner

Hobbies — birdwatching, photography, hiking, biking, reading, star gazing