# KALPESH KRISHNA

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#### **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 (2<sup>nd</sup> among 66 students), Minor GPA: 10/10

**INTERNSHIPS** 

Google Brain (upcoming)

May '20 - August '20 Research Intern under Aurko Roy Mountain View, CA

Google AI Language

Research Intern under Gaurav Singh Tomar and Ankur Parikh

May '19 - September '19 New York, NY

Toyota Technological Institute at Chicago

Research Intern under Karen Livescu, Liang Lu and Kevin Gimpel

May '17 - July '17

May '16 - August '16

Chicago, IL

**Mozilla Foundation** 

Google Summer of Code Intern under Armen Zambrano

Mumbai, India / London, UK

#### RESEARCH PAPERS

- Thieves on Sesame Street! Model Extraction of BERT-based APIs **K. Krishna**, G.S. Tomar, A.P. Parikh, N. Papernot, M. Iyyer ICLR 2020
- Generating Question-Answer Hierarchies

**K.** Krishna, M. Iyyer

ACL 2019

- Syntactically Supervised Transformers for Faster Neural Machine Translation N. Akoury, **K. Krishna**, M. Iyyer ACL 2019
- Trick or TReAT: Thematic Reinforcement for Artistic Typography P. Tendulkar, K. Krishna, R. Selvaraju, D. Parikh ICCC 2019 (Best Presentation Award)
- Revisiting the Importance of Encoding Logic Rules in Sentiment Classification K. Krishna, P. Jyothi, M. Iyyer EMNLP 2018 (oral presentation, short paper)

 $<sup>^{1}</sup>$ Use the URL martianside ofthemoon.github.io in case hyperlinks do not work

- Hierarchical Multitask Learning for CTC-based Speech Recognition *K. Krishna*, *S. Toshniwal*, *K. Livescu*
- A Study of All-Convolutional Encoders for Connectionist Temporal Classification
   K. Krishna, L. Lu, K. Gimpel, K. Livescu
   ICASSP 2018 (Awarded SPS Travel Grant)

#### SOFTWARE PAPERS

 SunPy: A Python package for Solar Physics S.J. Mumford and others JOSS 2020

#### AWARDS

- Victor Lesser Graduate Scholarship 2019 at UMass Amherst
- Sharad Maloo Memorial Gold Medal 2018 at IIT Bombay (For outstanding academic and extra-curricular achievements)
- UMass CICS Graduate Fellowship 2018
- Cargill Global Scholarship 2016-18 (Awarded by the IIE and Cargill Inc for academic 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

#### 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 two UMass undergraduates (Jack Merullo, Luke Yeh) on their honors thesis (2019-) and student teams for the industrial mentorship projects (COMPSCI 696) in Spring 2019, 2020.

- Graduate Teaching Assistant at UMass Amherst in Deep Learning for NLP (2019)
- 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 SRW '19, '20; ACL '20
- 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<sup>2</sup>
- Top 10 at the Astronomy Olympiad's Indian Selection Camp for IOAA '14, (20000 candidates)
- 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 graduate school applications, biking and computer science
- Led the development of a beginner's programming wiki with the Web and Coding Club, IIT Bombay
- StackOverflow Active contributor, top 8% 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

<sup>&</sup>lt;sup>2</sup>Couldn't attend due to clashing college schedule