

# Yash Kumar Lal

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## Education

<b>Stony Brook, NY</b>	<b>Stony Brook University</b>	<b>August 2020 –</b>
• PhD in Computer Science. Advisor: Niranjan Balasubramanian. Research Area: Question Answering		
<b>Baltimore, MD</b>	<b>Johns Hopkins University</b>	<b>August 2018 – May 2020</b>
• M.S.E. in Computer Science. Thesis: Low resource problems in NLP. Advisor: Philipp Koehn. CGPA: 3.94		
<b>Manipal, India</b>	<b>Manipal Institute of Technology</b>	<b>Aug 2014 – June 2018</b>
• B.Tech. in Computer Science Engineering. CGPA: 3.34		

## Employment

<b>Research Intern</b>	<b>Salesforce Inc.</b>	<b>May 2022 – Aug 2022</b>
• Project Title: Leveraging Knowledge Graphs for Pre-Training Question Decomposers		
• Designed a strategy to extract synthetic data from KBs analogous to multi-hop reasoning steps		
• Mentors: Semih Yavuz, Ye Liu, Yingbo Zhou		
<b>NLP Engineer Intern</b>	<b>ThreatLandscape</b>	<b>Jan 2018 – June 2018</b>
• Created auto-annotated data for relation extraction of cyber entities using weak supervision. (Python, Prodigy)		
• Improved precision of the MVP of the company - an NLP engine for threat actor analysis - by 3 points (PyTorch)		
<b>Research Intern</b>	<b>IIIT-Hyderabad</b>	<b>May 2017 – July 2017</b>
• Extended previous work to enhance neural embeddings for polysemous words (Python, Word2Vec)		
• Created more fine-grained representations than Word2Vec		

## Technical Experience

### Publications

- **Using Commonsense Knowledge to Answer Why-Questions.** EMNLP 2022.
- **TellMeWhy: A Dataset for Answering Why-Questions in Narratives.** Findings of ACL-IJCNLP, 2021.
- **IrEne-viz: Visualizing Energy Consumption of Transformer Models.** EMNLP Demo, 2021.
- **IrEne: Interpretable Energy Prediction for Transformers.** ACL-IJCNLP, 2021.
- **Temporal Reasoning in Natural Language Inference.** Findings of EMNLP, 2020.
- **Sentence-Level Adaptation for Low-Resource Languages.** LoResMT workshop, MT Summit, 2019.
- **De-Mixing Sentiment from Code-Mixed Text.** ACL Student Research Workshop, 2019.
- **Johns Hopkins University Submission for WMT News Translation Task.** WMT, 2019.
- **Identifying Clickbait: A Multi-Strategy Approach Using Neural Networks.** SIGIR, 2018.
- **SWDE: A Sub-Word And Document Embedding Based Engine for Clickbait Detection.** Computational Surprise Workshop, SIGIR, 2018.

### Projects

- **Ping** - A smart platform for language independent communication between businesses and their customers. Uses AI to present messages to users, in their preferred language. (Swift 3, Python, Redis, Travis CI, AWS)
- **hello friend** - SMS service utilising natural language processing to bring essential smartphone features to simple feature phones. (Python, Heroku)
- **simmrr** - New metric for Microsoft MSMARCO tasks using Microsoft Gen Encoder (Python)

### Additional Experience and Awards

- **Winner, Acceleprise Award** at AngelHack Global Demo Day '17, San Francisco; AngelHack Hyderabad '17
- **Top 10 in India:** Microsoft code.fun.do National Showcase, 2017
- **Chair:** NAACL 2022 Reproducibility Track
- **Organizer:** Commonsense Representation and Reasoning Workshop, ACL 2021
- **Reviewer:** ECIR '19, '21; WMT '19; TALLIP ('20); EMNLP '21-'22; ACL Rolling Review Nov '21 - present
- **Program Committee:** ACL SRW '20-'21; AACL SRW '20; NAACL '21; NAACL SRW '21