

# Nihal V. Nayak

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## CONTACT INFORMATION

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## EDUCATION

**Brown University**, Providence, USA  
Ph.D. in Computer Science, 2019 - Present

**M. S. Ramaiah Institute of Technology**, Bangalore, India  
B.E. in Information Science and Engineering, 2013 - 2017

## EXPERIENCE

**Brown University**, Providence, USA  
Advisor: Stephen H. Bach  
*Graduate Research Assistant* **August 2019 - Present**  
Introduced a novel graph neural network for zero-shot learning with common sense knowledge graphs. Achieved new state-of-the-art accuracies on five zero-shot benchmark datasets in object classification, intent classification, and fine-grained entity typing tasks.

**Stride.AI**, Bangalore, India  
*NLP Engineer* **November 2017 - May 2019**  
Researched on low resource information extraction in financial domain. Improved the state-of-the-art performance for financial NER dataset by 5.8 accuracy points [[AAAI-MAKE 2019](#)].

StrideSDK: Developed a proprietary python package for information extraction. The library is used in 20+ projects.

*Summer Intern* **June 2016 - August 2016**  
Involved in data scraping to parse third party public portals to get key data points.

**Indian Institute of Science**, Bangalore, India  
Advisor: H. S. Jamadagni  
*Project Assistant* **August, 2017 - November, 2017**  
Involved in data creation and validation of sub-components of a video analytics project.

*Project Intern* **July 2015 - July 2017**  
Developed a novel vocabulary flashcard application with a short answer grading algorithm [[ACL SRW 2017](#)].

Developed a web application for Ministry of Micro, Small and Medium Enterprises (Govt. of India) to digitize application process at the IISc MSME Centre of Excellence.

## HONORS AND AWARDS

Received travel grant from Association for Computational Linguistics to attend ACL 2017 in Vancouver, Canada.

Received Best Outgoing Student Award (2013 - 2017) from Department of Information Science and Engineering, M.S. Ramaiah Institute of Technology.

Received USD 2000 for winning the 2015 IEEE/IBM Watson Showcase (worldwide competition) [[Article](#)].

## PREPRINTS

**Nihal V. Nayak** and Stephen H. Bach. **Zero-Shot Learning with Common Sense Knowledge Graphs**. *ArXiv 2006.10713, 2020* [[PDF](#)].

PUBLISHED PAPERS Anush Kumar, **Nihal V. Nayak**, Aditya Chandra and Mydhili K. Nair. **Study on Unsupervised Statistical Machine Translation for Backtranslation**. *International Conference on Recent Advances in Natural Language Processing (RANLP 2019)* [PDF].

**Nihal V. Nayak**, Pratheek Mahishi and Sagar M. Rao. **DEXTER - Data EXtraction and Entity Recognition for Low Resource Datasets**. *AAAI 2019 Spring Symposium on Combining Machine Learning with Knowledge Engineering (AAAI-MAKE 2019)*. (Acceptance: 55%). [PDF].

**Nihal V. Nayak** and Arjun R. Rao. **Context Based Approach for Second Language Acquisition**. *13th Workshop on Innovative Use of NLP for Building Educational Applications (BEA at NAACL 2018)* [PDF].

**Nihal V. Nayak**, Tanmay Chinchore, Aishwarya Hanumanth Rao, Shane Michael Martin, Sagar Nagaraj Simha, G.M. Lingaraju and H.S. Jamadagni. **V for Vocab: An Intelligent Flashcard Application**. *55th Annual Meeting of the Association for Computational Linguistics - Student Research Workshop (ACL 2017)*. (Acceptance: 40%) [PDF].

Mydhili Nair, **Nihal Nayak** and Arjun Rao. **Data Migration Techniques from SQL to NoSQL**. *NoSQL: Database for Storage and Retrieval of Data in Cloud*. Chapman and Hall/CRC, 2017. [Article]

LEADERSHIP  
ROLES

Head of Operations for TEDxMSRIT 2016. Managed over 100+ volunteers in 4 departments - logistics, design, ticket sales, and social media.

Overall Coordinator for IEEE Women in Engineering (WiE) Chapter in MSRIT 2015. Coordinated with 50+ volunteers across different departments.

Student Representative in the College Sports Committee for Athletics for the years 2015-16, 2016-17. Captain of Athletics team for the year 2016-17. Under my captaincy, the team won the 1st Inter-GEF Annual Athletics Meet.

PROFESSIONAL  
SERVICE

Reviewer: ACL SRW 2018, 2020

Volunteer: ACL 2017