Nihal V. Nayak

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https://nihalnayak.github.io

EDUCATION

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

- **M. S. Ramaiah Institute of Technology**, *India* — *2013 - 2017*
  B.E. in Information Science and Engineering
  Best Outgoing Student Award

EXPERIENCE

- **BATS Research, Brown University**
  Advisor: Stephen H. Bach
  Graduate Research Assistant — *August 2019 - Present*
    - ZSL-KG: Researched on zero-shot learning with common sense knowledge graphs. Introduced a novel framework to create general-purpose classifiers without any labeled data in natural language processing and computer vision.

- **Stride.AI**
  NLP Engineer — *November 2017 - May 2019*
    - DEXTER: Contributed to the Research and Development of Bi-LSTM based multilingual low resource entity extraction system. Our system outperforms the current state-of-the-art (SOTA) for financial NER dataset (Link). Our system scored F1 = 87.48 (previous SOTA F1 = 82.1).
    - StrideSDK: Developed a proprietary python package for Information Extraction (IE). The library is being used in 20+ projects.

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

- **DESE (formerly CEDT), Indian Institute of Science**
  Advisor: H. S. Jamadagni
  Project Assistant — *August 2017 - November 2017*
    - Contributed to the Video Analytics project: Involved in data creation and validation of 5 sub-components in the project.

  Project Intern — *July 2015 - July 2017*
    - V for Vocab: Developed a novel vocabulary flashcard application which incorporates Testing Effect through production tests and grades the user's text response using an alignment based short answer grading algorithm.
    - 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.

ACHIEVEMENTS

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

- Received USD 2000 for winning 2015 IEEE/IBM Watson Showcase (Worldwide Competition on Cognitive Computing) for project Wordinator (Link).

PREPRINTS

- **Nihal V. Nayak** and Stephen H. Bach **Zero-Shot Learning with Common Sense Knowledge Graphs**. (Link)

PUBLICATION

- 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). Varna, Bulgaria*. (Link)

- **Nihal V. Nayak**, Pratheek Mahishi and Sagar M. Rao. **DEXTER - Data EXTraction & Entity Recognition for Low Resource Datasets**. *AAAI 2019 Spring Symposium on Combining Machine Learning with Knowledge Engineering (AAAI-MAKE 2019). Stanford University, Palo Alto, California, USA*. (Link)

- **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), New Orleans, USA.* (Link)

- **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), Vancouver, Canada.* (Link)

- 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. (Link)

PROFESSIONAL SERVICE

- **Reviewer**: ACL SRW 2018, ACL SRW 2020
- **Volunteer**: ACL 2017