Nihal V. Nayak

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https://nihalnayak.github.io

EDUCATION

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

EXPERIENCE

- **Stride.AI**
  NLP Engineer   *November 2017 - May 2019*
  - 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 for Financial NER Dataset (Link). Our system scores F1 = 87.48 (current SOTA F1 = 82.1). Appeared in AAAI - MAKE 2019.
  - StrideSDK - Developed a proprietary python package for Information Extraction (IE). The library is being used in 20+ projects.
  - Contributed to the development of Information Extraction pipelines for several POCs

  Summer Intern   *June 2016 - August 2016*
  - Involved in data scraping using NLP (Natural Language Processing) and Python, to parse third party public portals to get key data points.

- **DESE (formerly CEDT), Indian Institute of Science**
  Advisor: Prof. 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*
  - 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. Published at Student Research Workshop - ACL 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.

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).

PUBLICATION

- **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)

PROJECTS

- **Context Based Approach for Second Language Acquisition**   *BEA13 at NAACL 2018*
  - Trained logistic regression model to predict the likelihood of a student making a mistake while answering an exercise on Duolingo. Used features inspired by research in code-mixed language-learning where context plays an important role.
  - Result: AUROC scores for English/Spanish = 0.821, Spanish/English = 0.790 and French/English = 0.812. 2nd best linear model, finished overall 9th in SLAM 2018. (Link).

- **Wordinator**   *IEEE / IBM Watson Showcase 2015*
  - Developed a reverse dictionary to help language learners with "Tip of the Tongue" moments. Trained IBM Watson's Natural Language Classifier with word-meaning labels scraped from the Internet.

TECHNICAL TALK

- **Sentiment Analysis on Demonetization in India** in *Faculty Development Program on Cognitive Computing* at M S Ramaiah Institute of Technology (January, 2017).

PROFESSIONAL SERVICE

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

LEADERSHIP ROLES

- 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.

- Coordinator (Head of Operations) for TEDxMSRIT 2016. Managed and assigned tasks to 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.