

# Nihal V. Nayak

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 <https://iampuntre.github.io>

## EDUCATION

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

## EXPERIENCE

- **Stride.AI** November 2017 - Present  
*NLP Engineer*
  - Contributed on Research and Development of learning based Low Resource Entity Extraction System. The system can be used to train new models as well as perform transfer learning using pretrained models.
  - Project lead for a proprietary Information Extraction (IE) library from PDF documents. The library allows developers to build heuristics to extract information from unstructured PDFs. The library is being used in 20+ projects.
- 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** August 2017 - November 2017  
Advisor: Prof. H. S. Jamadagni  
*Project Assistant*
  - Contributed on Video Analytics project: Reconstruction of papers on Crowd Detection. 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 flashcard application for learning words that incorporates Testing Effect (Cognitive Science) through production tests and grades the user's text response using an alignment based Automatic Short Answer Grading Algorithm (ASAG). 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 IISc MSME Centre of Excellence. The website was operational for 2 years.

## PUBLICATION

- **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](#))

## ACHIEVEMENTS

- Received travel grant from Association for Computational Linguistics to attend ACL 2017 in Vancouver, Canada.
- Best Outgoing Student (2013-2017) from Department of Information Science and Engineering, Ramaiah Institute of Technology.

- Received USD 2000 for winning 2015 IEEE/IBM Watson Showcase (Worldwide Competition on Cognitive Computing) for project Wordinator ([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. Made use of 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*
  - A reverse dictionary to help language learners search for phrases. Trained IBM Watson's Natural Language Classifier with word-meaning labels scraped from the Internet. Developed a NodeJS server to fetch results from the API.

## 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

## EXTRA CURRICULAR ACTIVITIES

- Coordinator (Head of Operations) for TEDxMSRIT 2016.
- Captain of Athletics team for the year 2016-17. Student Representative in the College Sports Committee for Athletics for the years 2015-16, 2016-17.
- Overall Coordinator for IEEE Women in Engineering(WiE) Chapter in MSRIT 2015.