

Nihal V. Nayak

CONTACT INFORMATION

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EDUCATION

Brown University, Providence, USA
Advisor: Stephen H. Bach
Ph.D. in Computer Science, 2019 - Present
Sc.M. in Computer Science, 2019 - 2021

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

EXPERIENCE

ASAPP, New York, USA
ML Research Intern 05/2022 - 09/2022
Mentors: Clemens Rosenbaum and Ethan R. Elenberg

Stride.AI, Bangalore, India
NLP Engineer 11/2017 - 05/2019
Summer Intern 06/2016 - 08/2016

Indian Institute of Science, Bangalore, India
Project Assistant 08/2017 - 11/2017
Project Intern 07/2015 - 07/2017
Advisor: H. S. Jamadagni

HONORS AND AWARDS

Best Outgoing Student Award (Department), M.S. Ramaiah Institute of Technology.
Travel award for ACL 2017 in Vancouver, Canada.
Winner of 2015 IEEE/IBM Watson Showcase (worldwide competition) [[Article](#)].

PREPRINT / UNDER REVIEW

Martha Lewis*, **Nihal V. Nayak***, Peilin Yu, Qinan Yu, Jack Merullo, Stephen H. Bach, Ellie Pavlick. **Does CLIP Bind Concepts? Probing Compositionality in Large Image Models**, *ArXiv*, 2023 [[PDF](#)][[Code](#)].

JOURNAL PAPERS

Nihal V. Nayak and Stephen H. Bach. **Zero-Shot Learning with Common Sense Knowledge Graphs**. *Transactions on Machine Learning Research (TMLR)*, 2022 [[PDF](#)] [[Code](#)] [[Project](#)].

CONFERENCE PAPERS

Nihal V. Nayak*, Peilin Yu*, and Stephen H. Bach. **Learning to Compose Soft Prompts for Compositional Zero-Shot Learning**, *International Conference on Learning Representations (ICLR)*, 2023 [[PDF](#)] [[Code](#)].

Stephen H. Bach*, Victor Sanh*, Zheng-Xin Yong, Albert Webson, Colin Raffel, **Nihal V. Nayak**, Abheesht Sharma, Taewoon Kim, M Saiful Bari, Thibault Fevry, Zaid Alyafeai, Manan Dey, Andrea Santilli, Zhiqing Sun, Srulik Ben-David, Canwen Xu, Gunjan Chhablani, Han Wang, Jason Alan Fries, Maged S. Al-shaibani, Shanya Sharma, Urmish Thakker, Khalid Almubarak, Xiangru Tang, Xiangru Tang, Mike Tian-Jian Jiang, and Alexander M. Rush. **PromptSource: An Integrated Development Environment and Repository for Natural Language Prompts**, *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics: System Demonstrations*, 2022 [[PDF](#)] [[Code](#)].

Wasu Piriyaikulij, Cristina Menghini, Ross Briden, **Nihal V. Nayak**, Jeffrey Zhu, Elaheh Raisi, and Stephen H. Bach. **TAGLETS: A System for Automatic Semi-Supervised Learning with Auxiliary Data**, *Conference on Machine Learning and Systems (MLSys)*, 2022 [[PDF](#)][[Project](#)].

Victor Sanh*, Albert Webson*, Colin Raffel*, Stephen H. Bach*, Lintang Sutawika, Zaid Alyafeai, Antoine Chaffin, Arnaud Stiegler, Teven Le Scao, Arun Raja, Manan Dey, M Saiful Bari, Canwen Xu, Urmish Thakker, Shanya Sharma, Eliza Szczechla, Taewoon Kim, Gunjan Chhablani, **Nihal Nayak**, Debajyoti Datta, Jonathan Chang, Mike Tian-Jian Jiang, Han Wang, Matteo Manica, Sheng Shen, Zheng Xin Yong, Harshit Pandey, Rachel Bawden, Thomas Wang, Trishala Neeraj, Jos Rozen, Abheesht Sharma, Andrea Santilli, Thibault Fevry, Jason Alan Fries, Ryan Teehan, Stella Biderman, Leo Gao, Tali Bers, Thomas Wolf, and Alexander M. Rush. **Multitask Prompted Training Enables Zero-Shot Task Generalization**. *International Conference on Learning Representations (ICLR)*, 2022 [[PDF](#)][[Code](#)]. (**Spotlight**)

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](#)].

WORKSHOP
PAPERS

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)*. [[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)*. [[PDF](#)].

BOOK
CHAPTERS

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](#)]

UNPUBLISHED
MANUSCRIPT

Nihal V. Nayak, Ethan R. Elenberg, and Clemens Rosenbaum. **CEREAL: Few-Sample Clustering Evaluation**, *ArXiv*, 2022 [[PDF](#)].

PROFESSIONAL
SERVICE

Reviewer:

AAACL-IJCNLP SRW: 2020

ACL SRW: 2018, 2020, 2022, 2023

CVPR: 2023

ICCV: 2023

KDD: 2023

NAACL SRW: 2021

NeurIPS: 2023

Volunteer:

ACL 2017