

KALLURI SHAREEF BABU

Post-Doc Researcher, LEAP Lab, Dept. of Electrical Engineering, || IISc, Bangalore, India

+91-9620789927 || E-mail: shareefbabu1@gmail.com

Web links : [Linkedin](#) || [GoogleScholar](#)||[Personal Webpage](#)

EDUCATION

- **Ph.D.** || National Institute of Technology Karnataka (NITK) Surathkal, KAR, India
Department of Electronics and Communication Engineering July 2021
Specialization in Machine Learning and Speech Signal Processing
Cumulative GPA: 7.68/10.0
- **M.Tech.** || Jawaharlal Nehru Technological University, Anantapur Anantapur , AP, India
Department of Electronics and Communication Engineering Jun 2013
Specialization in Digital Electronics and Communication Systems
Percentage: 82.44%
- **B.Tech.** || Jawaharlal Nehru Technological University, Anantapur Anantapur , AP, India
Department of Electronics and Communication Engineering Jun 2011
Percentage: 67.76%.

TOP SKILLS

- Programming Language: **Python**
- Programming Tools (IDE): **Matlab**
- Python Libraries: **Numpy, Scipy, Matplotlib, Pandas**
- ML Libraries: **Keras, Tensorflow**
- Research Interest: **Speech Processing, Speaker diarization, Human Computer Interaction, Machine Learning, Deep Learning ,NLP**

RESEARCH EXPERIENCE

- **Post-Doc Researcher** November 2023 - Till date
[Learning and Extraction of Acoustic Patterns \(LEAP\) Lab](#),
Dept. of Electrical Engineering, Indian Institute of Science, Bangalore, India.

Projects Involved:
* Diarization of Speaker and Language in Conversational Environments ([DISPLACE](#))
[Lead organiser of DISPLACE challenge at Interspeech 2024](#)

Supervisor: [Prof. Sriram Ganapathy](#)
- **Post-Doc Researcher** May 2021 - March 2023
[Intelligent User Interface Lab](#),
Dept. of Computer and Information Science,
Seikei University, Tokyo, Japan.

Projects Involved:

1. User-adaptive artificial intelligence for human-computer interaction (PANORAMA) project funded by JST, AIP Japanese-German-French AI Research program
2. The Realization of an Avatar-Symbiotic Society where Everyone can Perform Active Roles without Constraint (Project manager is Professor Hiroshi Ishiguro at Osaka University) funded by JST Moonshot R&D goal 1: Realization of a society in which human beings can be free from limitations of body, brain, space, and time by 2050

Supervisor: [Prof. Yukiko I Nakano](#)

- **Research Scholar :** December 2013 to 2020
Department of Electronics and Communication Engineering,
National Institute of Technology Karnataka Surathkal.
Supervisor: [Dr. Deepu Vijayasanen](#)
- **Project Research Assistant (SERB Funded)** January 2019 to October 2020
Department of Electronics and Communication Engineering,
National Institute of Technology Karnataka Surathkal.
Title: Automatic Multilingual Speaker Profiling and Forensics.
Supervisor: [Dr. Deepu Vijayasanen](#)

Visiting Research Scholar: Learning and Extraction of Acoustic Patterns ([Leap Lab](#)),
Department of Electrical Engineering ,
Indian Institute of Sciences (IISc) Bangalore.
- **Research Intern** October 2012 to May 2013
National Atmospheric Research Laboratory ([NARL](#)), Gadanki, Tirupati, AP, India.
Topic: Implementation of Reed-Solomon Decoder Using Microblaze for Radiosonde Telemetry system..
Mentor: Dr. T.V.C. Sarma, Scientist/Engineer - SG

PUBLICATIONS

- **Journal:**
 - Kalluri, Shareef Babu, Deepu Vijayasanen, and Sriram Ganapathy, “Automatic speaker profiling from short duration speech data”, [Speech Communication](#) (2020). (SCIE Indexed, Impact factor: 3.2)
- **Conferences:**
 - Kalluri, Shareef Babu , Prachi Singh, Pratik Roy Chowdhuri, Apoorva Kulkarni, Shikha Baghel, Pradyoth Hegde, Swapnil sontakke, Deepak K T, Mahadeva Prasanna S R, Deepu Vijayasanen, Sriram Ganapathy, “The Second DISPLACE Challenge : DIarization of SPeaker and LAnguage in Conversational Environments,” in the proceedings of [Interspeech 2024](#) (*Accepted*).
 - Kalluri, Shareef Babu , Deepu Vijayasanen, Sriram Ganapathy, Ragesh Rajan M, Prashant Krishnan, “NISP: A Multi-lingual Multi-accent Dataset for Speaker Profiling”,in the proceedings of the 46th *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*. Toronto, Ontario, Canada, IEEE, 2021.
 - Kalluri, Shareef Babu , Deepu Vijayasanen, and Sriram Ganapathy, “ A Deep Neural Network Based End to End Model for Joint Height and Age Estimation from Short

Duration Speech”, *International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, IEEE, 2019, Brighton, UK.

- Kalluri, Shareef Babu, Ashwin Vijayakumar, Deepu Vijayasenan, and Rita Singh, “ Estimating Multiple Physical Parameters from Speech data”, in *IEEE 26th International Workshop on Machine Learning for Signal Processing (MLSP)*, 2016, Salerno, Italy.
- Kalluri, Shareef Babu and Deepu Vijayasenan, “ Robust features for automatic estimation of physical parameters from speech”, in *IEEE Region 10 Conference, TENCON 2017*, Penang, Malaysia.
- Kotra Venkata Sai Ritwik, Kalluri, Shareef Babu, Deepu Vijayasenan, “ COVID-19 Detection from Spectral features on the DiCOVA Dataset”, in the proceedings of *Interspeech 2021*, Brno, Czech Republic.
- Deepu Vijayasenan, Kalluri, Shareef Babu, K Sreekanth, and Ansal Issac, “ Study of Wireless Channel Effects on Audio Forensics”, in *IEEE 22nd Annual International Conference on Advanced Computing and Communication (ADCOM)*, 2016, Bangalore, India.

- **Other Publications**

- Kotra Venkata Sai Ritwik, Kalluri, Shareef Babu, Deepu Vijayasenan, “ COVID -19 Patient Detection from Telephone Quality Speech Data”, [arXiv preprint arXiv:2011.04299 \(2020\)](#).

PROFESSIONAL MEMBERSHIPS

- Member, ACM.

PROFESSIONAL SERVICE

- Reviewer, Journal of Speech Communication
- Reviewer, Interspeech 2021 - 2024
- PC Member, Annual Conference on Intelligent User Interfaces (IUI) 2022 - 2024
- PC Member, SPECOM 2023
- Reviewer, IEEE CONECCT 2020, SPCOM 2024.

[All the information written here is true to the best of my knowledge]

Kalluri Shareef Babu