# KALLURI SHAREEF BABU

Post-Doc Fellow, Leap-Lab, Dept.of Electrical Engineering || IISc, Bangalore || Karnataka +91-9620789927 || E-mail: shareefbabu1@gmail.com Web links : Linkedin || GoogleScholar

### 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	
$\bullet$ 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, Shell Scripting
- Programming Tools (IDE): Matlab
- Python Libraries: Numpy, Scipy, Matplotlib, Pandas
- ML Libraries: Keras, Tensorflow
- Research Interest: Speech Processing, Human Computer Interaction, Machine Learning, Deep Learning, Speaker Diarization, ASR

#### **RESEARCH EXPERIENCE**

•	<b>Post-Doc</b>	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)

Supervisor: Dr. Sriram Ganapathy

#### • Post-Doc Researcher

Intelligent User Interface Lab, Dept. of Computer and Information Science, Seikei University, Tokyo, Japan. May 2021 - March 2023

**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 Vijayasenan

• 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 Vijayasenan

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:
  - <u>Kalluri</u>, Shareef Babu, Deepu Vijayasenan, and Sriram Ganapathy, "Automatic speaker profiling from short duration speech data", Speech Communication (2020). (SCIE Indexed, Impact factor: 3.2)
- Conferences:
  - <u>Kalluri, Shareef Babu</u>, Deepu Vijayasenan, Sriram Ganapathy, Ragesh Rajan M, Prashant Krishnan, "NISP: A Multi-lingual Multi-accent Dataset for Speaker Profiling", in the proceedings of the 46<sup>th</sup> IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP). Toronto, Ontario, Canada, IEEE, 2021.
  - <u>Kalluri, Shareef Babu</u>, Deepu Vijayasenan, 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 26<sup>th</sup> International Workshop* on Machine Learning for Signal Processing (MLSP), 2016, Salerno, Italy.

- <u>Kalluri, Shareef Babu</u> 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, <u>Kalluri, Shareef Babu</u>, 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 22<sup>nd</sup> Annual International Conference on Advanced Computing and Communication (ADCOM)*, 2016, Bangalore, India.
- Other Publications
  - Kotra Venkata Sai Ritwik, <u>Kalluri, Shareef Babu</u>, 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, Interspeech 2022. Interspeech 2023
- PC Member, Annual Conference on Intelligent User Interfaces (IUI) 2022, 2023, 2024
- PC Member, SPECOM 2023
- Reviewer, IEEE CONECCT 2020.

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

Kalluri Shareef Babu