



# SUMUKH S BADAM

## SENIOR RESEARCH ENGINEER

### PERSONAL PROFILE

I am a Research engineer employing ML and Deep learning techniques for analysis of Audio and Speech content .

### WORK EXPERIENCE

#### Senior Research Engineer

Zapr Media Labs | Feb 2019 - present

- Developed speaker verification module based on speaker embedding extracted using deep learning method.
- Implemented and improved multispeaker neural text to speech (NTTS) by employing speaker embedding. Enabling speech synthesis of speaker unseen during training with as little as 30s of audio sample.
- Adapted the NTTS to support prosodic features like speech rate, pause break, and volume in a controllable manner.
- Developed speech enhancement algorithm using Denoise Autoencoder and integrated it into the ASR pipeline.
- Developed punctuation restoration module for Indian languages and integrated it into the ASR pipeline.
- Low resource TTS engine I developed won the national level challenge organized by the Govt of India in collaboration with IIT Madras

#### Senior Software Engineer

Sirena Technologies | Sep 2014 - Feb 2019

- Developed an Automatic Speech Recognition engine using CTC based framework for Indian English, achieved a WER about 20%.
- Developed a Wake Word Engine to trigger audio commands on the robot. The system had an accuracy of 85%.
- Developed toolkit for teaching and evaluating Visual Programming for kids using WX python.

### EDUCATIONAL HISTORY

#### Manipal Institute of Technology

B.E Electronics and Communication | Jul 2010 - May 2014

- GPA: 9.1/10
- Prototyped a Medical Reminder Device under the supervision of Prof. Anil Tumkur. Data Collected by the device was used in his thesis work.
- Secured 9th position out of 60 competing teams at the national level competition held by ABU Robocon in 2013. Developed an autonomous robot to perform pick and drop tasks within 2 mins.

### CONTACT ME AT



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### SKILLS SUMMARY

•••• Python

•••• Pytorch

•••• Tensorflow

•••• C++

•••• C

### CERTIFICATION



Deep Reinforcement Learning  
Nano Degree by Udacity (2019)

### WORK REFERENCES

Dr. Sharath Adavanne  
Senior Research Scientist  
Zapr Media Labs  
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