

Ananya Kumar

Bengaluru, India

ananya.kumar@fakeemail.com | +91 9876 543210 | LinkedIn | GitHub

Education

Indian Institute of Science

Master of Technology in Computational Linguistics

Aug 2019 – Jul 2021 | Bengaluru, India

GPA: 9.7/10.0

Activities: Natural Language Processing Research Group, Speech Recognition Lab
Assistant, Linguistics Society

Relevant Coursework: Speech Recognition, Speech Synthesis, Signal Processing,
Phonetics, Acoustic Modeling, Language Modeling, Deep Learning for Speech

Bachelor's Degree: B.Tech. in Electronics and Communication Engineering, National
Institute of Technology Surathkal, GPA: 9.3/10.0

Work Experience

Speech Technologies Engineer | Amazon | Aug 2021 - Present | Bengaluru, India

- Developed Alexa voice recognition systems for Indian languages improving accuracy by 35% for diverse accents and dialects.
- Created neural text-to-speech models generating natural-sounding voices for 8 Indian languages.
- Implemented noise cancellation and acoustic adaptation algorithms enhancing speech recognition in challenging environments.
- Designed wake word detection system with 95% accuracy while maintaining low power consumption for embedded devices.

Skills

Speech Recognition: Acoustic Modeling, Language Modeling, Noise Reduction, Feature Extraction, Forced Alignment

Speech Synthesis: Text-to-Speech, Prosody Modeling, Voice Cloning, Neural Vcoders, Parametric Synthesis

ML/DL for Speech: HMMs, RNNs, Transformers, CTC, Attention Mechanisms, wav2vec,

WaveNet, Tacotron

Audio Processing: Feature Extraction, Signal Processing, MFCC, Spectrograms, Voice Activity Detection

Languages/Tools: Python, C++, Kaldi, Mozilla DeepSpeech, ESPnet, Tensorflow, PyTorch

Evaluation: Word Error Rate, BLEU, MOS, PESQ, A/B Testing, Objective and Subjective Metrics

Other: Multilingual Systems, Low-resource Languages, Wake Word Detection, Voice Authentication, Speech Enhancement

Certificates

Deep Learning for Speech Processing Specialization

Amazon Alexa Skills Development Certification

NVIDIA Deep Learning for Audio Processing

Advanced Signal Processing Certification

Awards

Best Speech Technology Implementation – Indian AI Conference 2023

Innovation Award – Amazon Voice Technology Summit 2022

Outstanding Research Paper – International Speech Communication Association 2021