# Sanjanaa G V

### Indian Institute of Technology, Madras



#### **Education**

Degree	Institution	%/CGPA	Year
Master of Technology. (Computer Science & Engg.)	Indian Institute of Technology, Madras	8.82	2023
Bachelor of Engg. (Electronics & Comm. Engg.)	RNS Institute of Technology, KA	8.78	2019
XIIth Std.	Karnataka State Board for Pre - University	94%	2015
Xth Std.	Central Board of Secondary Education	10	2013

## **Work Experience**

1. Software Engineer, Microsoft (R&D) Pvt. Ltd.:

June 2023 - Present

Incoming Software Engineer at Microsoft, Hyderabad

2. Systems Engineer, Infosys Limited:

Aug 2019 - July 2021

- Developed automation for application health checks and automatic report generation.
- o Enhanced existing codes based on requirements & monitored Critical Applications.
- 3. Research Intern, Siemens Technologies & Services Pvt. Ltd.:

June 2022 - July 2022

- Worked on a CMTI project to showcase a metaverse experience of industrial machinery through its Digital Twins.
- Worked on the backend to develop an AR/VR app with multiple APIs & API responses.

# **Projects**

1. Towards IndicRASA: Domain-specific conversation systems in Indian languages. Guide: Prof. Mitesh M. Khapra, Team size: 1, Al4Bharat Lab @ IITM

Aug 2022 - May 2023

Master Thesis Project

- o Curated benchmarks for domain-specific use cases to show the need for narrow-domain speech recognition systems.
- Developed a narrow-domain speech recognition system with a five-gram classLM TLG model on top of a general ASR to reduce the word error rate in domain-specific conversations in Indian languages.

#### 2. English to Kannada word Transliteration

April 2022 - May 2022

Faculty: Prof. Mitesh M. Khapra, Team size: 1

Fundamentals of Deep Learning - CS6910

- Developed and trained a sequence to sequence Recurrent Neural Network model to transliterate an English word (in Latin script) to Kannada word (in native script) using Gradient descent algorithm with Back propagation through time.
- Explored techniques like Attention, Dropout and Beam Search decoding to improve the seq2seq model.
- o Word Level Accuracy: 55.48% | Character Level Accuracy: 98.73% | Dataset: Dakshina Dataset

#### 3. Convolution Neural Network based Image Classifier

April 2022

Faculty: Prof. Mitesh M. Khapra, Team size: 1

Fundamentals of Deep Learning - CS6910

- o Explored techniques like Batch Normalization and Dropout to improve the performance of a CNN model.
- o Training Algorithm: Gradient descent with Back propagation. | Dataset : iNaturalist Dataset

#### Scholastic Achievements

- $\circ$  Secured All India Rank 45 in GATE CS 2021 with a percentile of 99.95%.
- Selected for Amazon ML Summer School 2022.

#### **Relevant Courses and Technical Skills**

- PG courses: Advanced Data Structures & Algorithms, Machine learning, Fundamentals of Deep Learning, Artificial Intelligence.
- **UG** courses: Object Oriented Programming using C++, Programming in C, Computer Communication Networks.
- Languages/ML Libraries/Utilities: C, C++, Java, Python, SQL, PostgreSQL, ActiveMQ, Spring Boot, Numpy, Keras, Pandas, LATEX, Git, Eclipse, Visual Studio.

# Positions of Responsibility

Teaching Assistant: Computer Organization & Architecture, Linear Algebra & Random Processes, Fund. of Deep Learning.