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Anandhini Rajendran

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### Education

#### University of California, San Diego

Master of Science in Computer Science

International Institute of Information Technology, Hyderabad

Bachelor of Technology (Honors) in Computer Science Engineering (CSE) GPA: 3.84/4.00 (WES)

### **Technical Skills**

Programming Languages: Python, C, C++, SQL, Scala, HTML/CSS, React, JavaScript, Bash Frameworks & Tools: Spark, Hive, NumPy, Pandas, Scikit-learn, OpenCV, PyTorch, Tensorflow, Beautiful Soup, Scrapy, Git **Concepts:** Statistical Methods in AI, Computer Vision, Machine Learning, Big Data, Operating Systems and Networks

# Publications

Kannan Kiruthika, Anandhini Rajendran, Vinoo Alluri, and Ravi Kiran Sarvadevabhatla. "Draw Fast, Guess Slow": Characterizing Interactions in Cooperative Partially Observable Settings with Online Pictionary as a Case Study. In IFIP Conference on Human-Computer Interaction, pp. 283-303. Cham: Springer Nature Switzerland, 2023.

#### Experience

#### **JIO Platforms Limited**

Software Development Engineer

- Worked in the Analytics CoE focusing on analysing and processing big data using Spark, Hive, and Nifi.
- Contributed to code migration and optimization for JioTV customer preferences, successfully reducing runtime by 61.11% through caching & performance tuning. In addition, worked on bug fixes & code migration for JioAirFiber.

# MarkovML India Pvt. Ltd.

Machine Learning Intern

- Designed and developed a dataset profiler that generates image feature vectors for building search engines. Experimented with different architectures, under resource constraints such as computing capacity.
- Custom-trained YOLOv5 and YOLOv6 for 11 domains and identified optimal hyperparameters.

# Centre for Visual Information Technology(CVIT) @ IIIT H

Undergraduate Researcher

- · Collaborated with Prof. Ravi Kiran and Prof. Vinoo Alluri on analyzing player behaviors in a communication-restricted setting by utilizing game telemetry data collected from online Pictionary.
- Contributed to the development of AI agents for the Cooperative Partially Observable (CPO) game Pictionary by utilizing text-to-image generators such as Stable Diffusion and DALL-E Mini.

#### Projects

**Linux C- shell** | Operating Systems, C

• Built a fully functional Linux shell in C that supports redirection, piping, environmental variables, and background and foreground process execution.

#### **SimpleRA** | Data Systems, C++

 Developed an RDBMS supporting database operations such as load, print, store, and transpose for integer-only tables, efficiently handling large-sized matrices.

# **Digital Image Processing** | Python, OpenCV

 Implemented Spatial and Fourier domain image filtering, morphological operations, image segmentation, and image compression using Huffman Coding & Edge detection methods. Coded a fingerprint enhancement system.

# **Optimization Methods** | Python

• Implemented Simplex Algorithm and Newton's Method using Backtracking line search. Coded Steepest Gradient Descent Algorithm using Exact line search and Backtracking line search.

San Diego, USA

July 2019 - June 2023 Hyderabad, India

Aug 2023 - Aug 2024 Mumbai, India

May - July 2022

Bengaluru, India

June 2021 - June 2023

Hvderabad. India

Sept 2024 Onwards