Sofia Panuganti

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EDUCATION

University of Maryland, Baltimore County *Baltimore, MD*
Master of Science, Computer Science **Expected Graduation: August 2023**

- **3.675**/4.0 GPA
- **Relevant Coursework:** Advanced Operating Systems, Design and Analysis of Algorithms, Principles of Computer Security, Data Visualization

Jawaharlal Nehru Technological University *TG, Hyderabad, India*
Bachelor of Technology, Computer Science and Engineering August 2017 – June 2021

- **3.72/**4.0 GPA

SKILLS

Programming Languages: Java, Python, C++, JavaScript, HTML, CSS
Web Development: ReactJS, Node.js
Operating Systems: Windows, macOS, Linux
Databases: MySQL, MongoDB
Tools & IDEs: Visual Studio Code, Eclipse, IntelliJ IDEA, PyCharm, Jupyter Notebook
Software Development: Object-oriented programming, data structures, algorithms, version control (Git)

PROJECTS

Image Texture Synthesis using Graphcut April 2022

- Independently conceptualized and executed an advanced image texture synthesis project using Graphcut techniques in Python, utilizing Git for version control and Jupyter Notebook for code organization
- Demonstrated strong problem-solving skills by implementing the Ford-Fulkerson algorithm to stitch patch regions from sample images, resulting in seamless output images with high visual fidelity

Distributed System with Multicasting and Locking December 2021

- Implemented Berkeley's algorithm for clock synchronization, causal ordered multicasting with vector clocks, and distributed locking with mutual exclusion algorithms to protect a shared file in a distributed system
- Utilized C++ on Linux to implement multi-threading, socket programming, and file I/O operations for precise communication and synchronization between processes across the distributed system

Encoder Decoder Model for Text Summarization June 2021

- Collaborated with team members to implement deep learning sequence-to-sequence techniques using Pandas and Keras, resulting in an advanced text summarization model with a 92% success rate
- Exhibited effective communication in presenting project updates and integrating feedback from the team

WORK EXPERIENCE

Graduate Student Assistant, *UMBC* January 2022 – Present
Department of Computer Science and Electrical Engineering

- Grading and providing constructive feedback on coursework, exams, and projects to ensure accurate and fair evaluations for over 200 students under the direct supervision of the course instructor
- Provide academic support to over 60 undergraduate students by clarify grading questions

Teaching Assistant, *JNTU* January 2019 – June 2019
Department of Computer Science and Engineering

- Conducted weekly office hours to provide individual tutoring and problem set instruction to 30 students, resulting in a 10% increase in class grade

ADDITIONAL EXPERIENCE

Hyderabad Youth Assembly, Vice Chair December 2018 – December 2019

- Led and managed a team of 25 to successfully organize and execute United Nations SDG goals, positively impacting 1,000 underprivileged individuals and showcasing strong leadership and management skills