# **Manas Tiwari**

+1 (865) 773-2945 | tiwarimanas27@gmail.com | Knoxville, TN GitHub: manasIO | Leetcode: manas io | LinkedIn: Manas-Tiwari-

**EDUCATION** University of Tennessee, Knoxville, TN - USA

May 2024

Master of Science in Computer Science, GPA: 3.57/4.00

Acharya Institute of Technology – Bangalore, India

July 2022

Bachelor of Technology in Information Science and Engineering CGPA: 8.58/10

## PROFESSIONAL University of Tennessee, Knoxville, TN

Aug 2022 - Present

#### **EXPERIENCE**

**Graduate Teaching Assistant** 

- Demonstrated proficiency in parallel programming with MPI, utilizing the *OpenMPI* library and optimizing performance through techniques such as *GPU acceleration* and message-passing optimization, which improved the computational efficiency.
- Offered assistance to students in creating optimized C++ code, utilizing tools like *GDB* and *Valgrind* to debug and improve performance, and provided constructive feedback to enhance understanding. Implemented an automated grading system resulting in a 90% reduction in grading time.

# **Cognizant Technology Solutions, Bangalore**

Apr 2022 - Aug 2022

<u>Programmer Analyst Intern</u>

- Gained hands-on experience with Microsoft Azure platform, including services such as Azure Functions, Azure DevOps, Azure Active Directory, and other related tools. Assisted with troubleshooting reliability, testing, and deployment of software.
- Collaborated with other developers as a software engineer to design and implement a robust
  CI/CD pipeline for software development lifecycle (DevOps/Agile), ensuring timely delivery of
  high-quality applications.

### PROJECTS Sign Language Recognition using Convolutional Neural Network (CNN)

- Developed and implemented a robust system to recognize hand gestures with high accuracy using Convolutional Neural Network (CNN) algorithm.
- Trained the model with images using machine learning (ML) techniques, resulting in achieving 96% accurate results.
- Awarded 3rd prize as the best project for the department.

### **P&M Health Club**

 Design and developed a user-friendly website using PHP and MySQL to support a physical and mental health club. Built a database management system (DBMS) to store and manage data for registered users and their login credentials. Users can save 70% time by registering online. It also interactive UI (product quality) and payment processing enhancing the overall user experience.

## **CERTIFICATIONS** AWS Certified Cloud Practitioner, (AWS CCP)

Apr 2022

• Knowledge of AWS services, security, cloud architecture including compute, storage, networking, and databases.

Microsoft Certified Azure Fundamentals, (AZ 900)

Aug 2021

**Architecting with Google Compute Engine**, (Specialization)

Sep 2020

**SKILLS** Programming Languages: C/C++, Java, Python, Shell Scripting

Technologies: HTML, CSS, JavaScript, React.js, MySQL Operating Systems: Windows 10-11, Linux (Ubuntu 18.04)

Hardware: Microcontrollers, RISC/CISC architectures, Interaction with software

Software: Version Control (Git/GitHub), Fusion 360 (3D Modeling), Microsoft office (MS Word, Excel,

PowerPoint, Outlook)