

# PRAJWAL DM

Research and Development Intern

## PROFILE

I am a highly dedicated and motivated undergrad student currently in my 6<sup>th</sup> semester with a consistent GPA of 7.6. I have actively contributed to two research papers, with one already published in a reputed conference. In addition to my academic pursuits, I am working on an innovative cybersecurity project that explores the use of quantum methods to forge a fake transaction and validate them within blockchain systems, which reflect my keen interest in intersection of cybersecurity, block chain and quantum technologies.

## INTERSHIPS

### **Software Development Intern – SkillCraft Technology (Virtual)**

November 2024 – December 2024

- Developed programs for temperature scale conversion, random number guessing game with attempts tracking, sudoku puzzle solving and web scraping to extract product information from e-commerce sites into structured CSV files

### **Student Research Assistant – Atria Institute of technology**

October 2024 – June 2025

- Under Prof. Dr B.P. Pradeep Kumar on ASL Sign Recognition contributing to literature review, gaining insights from reference papers and driving impactful research advancements.

## PROJECTS

**ASL Gesture Recognition System** – Developed an ASL gesture recognition system with over 90% accuracy, contributed to a research publication, and created a foundation for building real-time sign language translation tools using ML tools, enhancing accessibility for the Deaf community

**KSL Gesture Recognition System** – Developed a KSL (Kannada Sign Language) gesture recognition systems where we modified the previously done ASL work into our native language which helps the deaf community of a specific native region

**Quantum Neural Network Simulator** – Worked on simulating quantum circuits using neural networks, specifically Restricted Boltzmann Machines (RBMs). Applied this method to approximate key quantum operations like Hadamard and Fourier transforms on entangled input states. Achieved high accuracy comparable to noisy quantum hardware, demonstrating the potential of classical neural networks in quantum simulation.

**QuantumLedger: A Blockchain Simulator**- Built a blockchain transaction simulator using Stream-lit that demonstrates the creation, forging, and validation of transactions in a quantum-secure environment. Integrated Shor's algorithm to simulate quantum attacks on cryptographic keys, showcasing how quantum computing could impact traditional blockchain security.

## EDUCATION

B.E in Computer Science and Engineering – Atria Institute of Technology

July 2022 – July 2023

Currently with a CGPA of **7.6** over 5 semesters

12<sup>th</sup> Std (Pre-University Education) – St Josephs Indian Composite PU College

June 2020 – May 2022

Graduated with an overall score of **78%**

10<sup>th</sup> Std (SSLC)- Little Lilly's English School

June 2010 – June 2020

Graduated with an overall score of **94%**

## DETAILS

+91 8748027233

prajwal.dm.04@gmail.com

Linkedin

<https://www.linkedin.com/in/prajwaldm152004/>

Git-Hub

<https://github.com/prajwal152004>

## SKILLS

Python Programming

Machine Learning

Java Programming

HTML

CSS

JavaScript

React

Nodejs

Cyber Security Fundamentals

Computer Networks

DBMS

AWS (S3,DynamoDB,EC2)

Research Paper Content Writing

## Languages

Kannada – Native

English – Highly Proficient

Hindi – Highly Proficient

German – Beginner A2

Japanese- Beginner A1