Doki Harikrishna

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# Objective

To contribute to an organization that values continuous learning and personal growth, providing opportunities to enhance my skills and knowledge while supporting the company's mission and objectives.

# Education

**BTech –**Aditya Institute of Technology and Management, CGPA – 8.80

2021 – 2025

**Intermediate –** Sri Basara Junior College, Percentage – 93.9 2019 –2021

**SSC –** Ravindra Bharathi School, CGPA – 9.8 2018 –2019

# Projects

**Secure and selective geographic opportunity routing against DoS attacks in Wireless Sensor Networks**

**Tools**: TCL (Tool Command Language), Ns2, Ubuntu

* Suggested Secure and Selective Authentication-based Geographic Opportunistic Routing (SSGOR) protocol for improving data security and reliability in IoT-based Wireless Sensor Networks (WSNs).
* Designed an SSI-based trust model and entropy-driven selective authentication algorithm to counter DoS attacks and maintain data integrity.
* Developed a distributed cooperative verification model to segregate attackers, cancel out redundant verifications, and avoid duplicate transmission.
* Lost 50% computational cost compared to current solutions while ensuring reliable and original data transfer, tested through extensive simulation.

**2048 Game | Deployed through GitHub**

* Designed a fully functional clone of 2048 game using tech stack i.e., Java Script, HTML, CSS
* Live demo: <https://harikrishnadoki.github.io/2048_game/>

# Technical Skills

**Programming:** C, Python, C++

**Core:** Basics of Assembly Language, MATLAB, Verilog HDL

**Development:** Basics of HTML, CSS, JS

**Database:** SQL

**Operating System:** Windows

# Soft Skills

Communication skills, Teamwork, Time management

# Internship

**Introduction to CNC systems using PLC and Step5 programming**  04/2024 – 05/2024

**Organization:** Bharat Heavy Electricals Limited (BHEL), Visakhapatnam

**Description:** Throughout my internship, I had first-hand experience of CNC systems that translated digital drawings into accurate machine motion for automatic manufacturing. I handled PLC integration and Step5 programming to deliver accurate operations. This experience built my technical capability and knowledge in hardware-software coordination in contemporary manufacturing.

# Certifications

* Embedded System Developer Virtual Internship by Edu skills, AICTE
* VLSI for beginners by NIELIT
* Productivity Enhancements and computational tools by APSSDC
* PCB Designing by APSSDC
* Amazon Web Services - Cloud Computing by APSSDC
* Introduction to Internet of Things by NPTEL
* Introduction to Industrial 4.0 and Industrial Internet of Things by NPTEL

# Co Curriculars

* Participated in Circuit Building competition conducted by Aditya Institute of Technology and Management.
* Presented an idea in **Smart India Hackathon (SIH)** on **Prohibition of hazardous cleaning of sewers using hazardous gas detecting device.**
* Presented an idea in **MSME** (Micro, Small and Medium Enterprises) on Train collision prevention - **The Karna System for Collision Prevention.**

# Hobbies

* Watching Documentaries

# Declaration

I hereby declare that the information furnished above is true to the best of my knowledge.