

# Doki Harikrishna

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## Objective

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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

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<b>BTech</b> – Aditya Institute of Technology and Management, CGPA – 8.80	2021 – 2025
<b>Intermediate</b> – Sri Basara Junior College, Percentage – 93.9	2019 – 2021
<b>SSC</b> – Ravindra Bharathi School, CGPA – 9.8	2018 – 2019

## Project

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

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

- 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.

## Technical Skills

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

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

**Development:** Basics of HTML, CSS

**Database:** SQL

**Operating System:** Windows

## Soft Skills

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Communication skills, Teamwork, Time management

## Internship

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### 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

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- 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

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- 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

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- Watching Documentaries