

# HARIYALA OMKARA NAGA SAI VARSHITH

B. Tech + M. Tech Dual Degree

Computer Science and Engineering

Indian Institute of Technology, Kharagpur

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## Education

Year	Degree/Exam	Institute	CGPA/Marks
2022	B. Tech + M. Tech Dual Degree	IIT Kharagpur	8.44/10
2017	Board of Intermediate Education	Mahathi Junior College	98.3%
2015	Board of Secondary Education	Dr. KKR's Gowtham High School	9.8/10

## Coursework Information

Programming and Data Structures	Database Management Systems (DBMS)
Algorithms - I, II	Advanced Database Management Systems (ADBMS)
Operating Systems	Software Engineering
Computer Networks	Computer Organization and Architecture
High Performance Computer Architecture	Distributed Systems
Image Processing	Object Oriented Systems
Theory and Applications of Blockchain	Scalable Data Mining
Instructional System Design	Knowledge Modeling and Semantic Technologies (KMST)

## Technical Skills

**Programming Languages:** C, Python, JavaScript, C#, C++, Bash

**Tools:** Git, Docker, Kubernetes, Make, Vim, Android Studio

**Frameworks:** Django, React, NodeJS, Express, React Native, Flask

**Databases:** MySQL, MariaDB, PostgreSQL, MongoDB

**Technologies:** Web and Android Application Development, Linux Kernel Development

## Projects

**Attribute Based Access Control in Linux – under Prof. Shamik Sural [M. Tech Project]** **Aug 2021 – Apr 2022**

- Studied existing access control models and their implementations in the Linux kernel
- Developed a kernel security module to enforce attribute-based access control for file system objects
- Developed user space tools and services in Python to interact with and control the security module

**SRE Internship | Honeywell** **May 2021 – July 2021**

- Worked closely with a team of interns and engineers to enhance Test Engineering Platform
- Integrated the platform with Microsoft Teams via Channel notifications and an interactive Chat Bot
- Fixed frontend/backend issues to improve user experience
- Learned and implemented Authentication and Role based Authorization using Azure AD

**Linked Movie Search - under Prof. Plaban Kumar Bhowmick [KMST Term Project]** **Aug 2019 - Nov 2019**

- Linked Movie Search is a search engine for movies using the Wikidata RDF data repository
- Developed the backend in Python using Flask Framework, frontend in HTML, CSS
- Used sparqlwrapper library to build valid SPARQL queries to obtain linked data from Wikidata and DBpedia

**Medkart - under Prof. Shamik Sural [DBMS Term Project]** **Mar 2020 - May 2020**

- Medkart is an online medical store with a web interface and android application
- Developed the cross-platform (android, iOS) mobile application using the React Native Framework
- Developed the mobile API backend using PHP and MySQL database