

# Nishita Kadian

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## EDUCATION

### TIET | THAPAR UNIVERSITY

CGPA: 9.22

BTECH IN ELECTRONICS

INSTRUMENTATION AND CONTROL

July 2023 | Patiala, India

## SKILLS

### LANGUAGES

C • C++ • Python • SQL

### SOFTWARE

Git • MATLAB • Autodesk Tinkercad •  
Autodesk Autocad

### FAMILIAR

Data Structures • Algorithms  
Database Systems • Operating System  
Low Level Design • Computer Networks

## LINKS

Website: [nishita-kadian.github.io](https://nishita-kadian.github.io)

Github: [nishita-kadian](https://github.com/nishita-kadian)

LinkedIn: [nishita-kadian-9542b7202](https://www.linkedin.com/in/nishita-kadian-9542b7202)

Hackerrank: [nkadian\\_be19](https://www.hackerrank.com/nkadian_be19)

LeetCode: [NK04](https://leetcode.com/NK04)

## ACHIEVEMENTS

- Earned maximum star gold badges in **Problem Solving, C++ and SQL** on **Hackerrank**.
- **350+ problems solved** on **LeetCode** with solutions hosted on **Github**.
- Awarded **TIET Merit Scholarship** Year 2021-22 for outstanding performance in academic year 2021-22 with **CGPA of 9.39**
- **Tata Imagination Challenge 2021**, Organized by Tata Sons, certificate of participation
- **Uber HackTag 2.0**, Organized by Uber, cleared 3 rounds, certificate of participation
- **Innovaccer's HackerCamp 22 powered by Microsoft**, Organized by Innovaccer, certificate of participation
- **Jumpstart powered by Publicis Sapient**, Organized by Publicis Sapient, certificate of participation
- **House of Code powered by Lowe's Companies Inc.**, Organized by Lowe's Companies Inc., certificate of participation
- Received **Gold medal** twice in **Taekwondo, Chandigarh State Open**.
- **Gold and Bronze medal** in Taekwondo, State Schools Tournament by Education Department, Chandigarh Administration

## PROJECTS

- **Movie Explorer (Github repo)** (2022)  
(Exploratory Project)  
Movies data taken from **Grouplens dataset**. Cleaned and processed to push it in SQLite database. **Backend**: Complete backend using **RESTful APIs** written in **Flask (Python)** tested using **Postman**, with **SQLite** for Database. Supports user login to mark watched movies. **Frontend**: Written with **HTML/CSS/JS** as Flask templates.
- **Deep Learning based High Resolution FPM (Report)** (2021)  
(Capstone Project, Dr. Vishal Shrivastava)  
**Fourier Ptychographic Microscopy (FPM)** offers a way to recombine multiple images to achieve the end goal of a high resolution image with a wider view. Constructed a **UNET Architecture** based deep learning network and planning to use it get high resolution samples of Malaria samples. Implementation was done in **MATLAB**.
- **Micro-controller based LPG Detection System (Report)** (2020)  
(UTA014-Engineering Design-2, Dr. Harpreet Vohra)  
Programmed **Arduino Uno** with **MQ-6 Gas detection** sensor along other electronic parts to detect gas concentrations from **200 to 10000ppm**. Reduced tentative cost to the minimum possible by trying all possible gas sensors, piezo buzzers and LCD displays.
- **Ultrasonic blind walking stick (Report)** (2020)  
(UTA014: Engineering Design-2, Dr. Sanjeev Rao)  
Programmed **Arduino Uno** with Ultrasonic Distance Sensor (**HC-SR04**) and Piezo buzzer to detect obstructing objects between **2cm to 80cm** and a 15° V-shaped angle centered around y-axis. Experimented and tested the model using Autodesk Tinkercad. [DEMO]
- **Irrigation system** (2020)  
(UTA025: Innovation and Entrepreneurship, Dr. MD Singh)  
Proposed an irrigation system powered by solar energy using solar panels. Moisture Sensor to detect when to start and stop watering the fields using an automatic irrigation module [yet to be designed]. pH Sensor for detecting when the soil needs fertilizers.