

# Lavanya Senthil



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## Skills

**Languages:** C , Java, Python, JavaScript,HTML,CSS,SQL

**Technologies & Tools:** ReactJS,OpenCv,pandas,numpy,keras,tensorflow

## Experience

### Centre for Cognitive And Computational Intelligence

*Research Internship( June 25' to Aug 25')*

PES University -Bangalore

## Education

### PES University -Bangalore

Oct 2023 - Present

B.E. in Computer Science and Engineering(AIML) **CGPA: 8.6/10**

Relevant Coursework: Data Structures and Algorithms,Data Science(Statistics),Web Technologies,Linear Algebra,Microprocessors and Computer Architecture, Operating Systems, Computer Networks.

### Delhi Public School East- Bangalore

**CBSE :93%(PCM) JEE: 93 percentile**

Apr 2021 - Apr 2023

12 Th grade -PCMC-Physics,Chemistry,Maths And Computer Science

### Baldwin Girls' High School.

**ICSE: 97.6%**

June 2009 - Apr 2021

**Clubs- The School Choir-** participated in inter house and inter school **singing** competitions and won

## Project Work

Oct 2023 - Present

### 1. AI-Based Visual Detection of Spice Adulteration Using Deep Learning (Ongoing)

Building an AI-powered system to detect spice adulteration (e.g., turmeric, chili) using CNNs and transfer learning (ResNet-50, MobileNetV2). Conducting data cleaning, labeling, and EDA on RGB image datasets with adulteration levels. Supporting model training, augmentation, and evaluation; achieving over 90% validation accuracy. Assisting in model optimization and mobile deployment using knowledge distillation.

### 2. Movie Booking Platform – Python, MySQL, Tkinter

Developed a BookMyShow-inspired ticket booking system with a responsive UI using Python Tkinter. Implemented seat selection and fast search functionality via trie trees. Managed dynamic bookings and movie data using MySQL queries. Integrated QR code generation for simulated payment and ticket confirmation.

### 3. Smart Voice-Controlled Car – Arduino, C/C++

Designed a dual-mode robotic car operable via voice commands and manual joystick controls through a Bluetooth-connected mobile app. Enabled directional movement, real-time obstacle avoidance using ultrasonic sensors, and automatic halting at red traffic lights using LDR-based detection. Simulated real-world RC vehicle behavior with both user control and autonomous safety features.

## Awards and Certificates

### 1. Issued By PES University

CNR Scholarship (top 20% of the department- 40% off on the fees ) - for sem1, sem2 and sem3

2. Issued by Baldwin Girls High School-Award for academic excellence-97% in board