

# Akash Singh

Portfolio

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## EDUCATION

- **Dayananda Sagar College Of Engineering** Bengaluru, India  
*Bachelor of Engineering-Computer Science And Engineering;* 2022 - 2026
- **Delhi Public School** Siliguri, India  
*12th Standard; CGPA: 9.6* 2020-2022

## TECHNICAL SKILLS

**Languages:** Python, JavaScript, TypeScript

**Frameworks And Libraries:** Flask,NodeJS,ExpressJS,React,NextJs,Bootstrap5,TailWind

**Databases And Tools:** MongoDB,MySQL,SQLite,Git,Github,Firebase

## EXPERIENCE

- **CodingZen** December 2023 - Present  
*Online Teaching (Full Stack) internship*
  - Spearheaded comprehensive virtual instruction in Full Stack Development at CodingZen, providing insightful guidance on front-end and back-end technologies to a diverse cohort of students.
  - Developed and delivered a dynamic curriculum, integrating real-world projects and interactive sessions to facilitate hands-on learning experiences, enabling students to grasp complex concepts effectively.

## PROJECTS

- **Quiz Quest|NextJs,Typescript,Firebase** | [GitHub](#) | [Website](#) :
  - The project facilitates administrators in attempting quizzes and managing quiz data, including scores, completion times, and specific quiz details along with allowing users to **create quizzes from Excel Sheets**.
  - Developed with **Next.js** and **TypeScript**, the project incorporates server-side rendering, seamless routing, strong typing, and improved code maintainability for an enhanced user experience and deployed on **Vercel**.
  - Integrated **Firebase** for **real-time database management** and **user authentication**, leveraging **Firestore** for data storage, **Firebase Authentication** for secure access,and implementing **Admin Dashboard**.
- **Motion Amplification Video (MAV)** |*MERN,Tailwind,AWS* | [GitHub](#) | [Demo Video](#) :
  - Developed a pioneering **cloud-based solution** for Motion Amplification Video (MAV) (**SIH'23 PS:1415**), revolutionizing vibration analysis by enabling accessibility from anywhere via processing video clips and extracting motion features frame by frame, it amplifies and replays these motions, unveiling micro-scale defects.
  - Implemented a cloud-based **dashboard** using **AWS S3 Bucket** and **AWS Cloudfront** for users to upload video clips and view processed results, enhancing accessibility from any location.
  - Contributed to the development of the **user interface (UI)** to provide essential data outputs such as **time waveforms** and **FFT spectra** for in-depth vibration analysis.
- **SleepSense** |*Python,Flask,Tensorflow* | [GitHub](#) :
  - Created **SleepSense**, a vigilant guardian against driver fatigue leveraging machine learning combined with image processing techniques to detect driver drowsiness and provide real-time alerts.
  - **Build a User Interface** using Flask for users to access our ML model from anywhere and provide real time protection and monitoring.
  - Lead a team of 4 people and prepared prototype of project during **Hackman V.4** and placed **Top 10** collaborating on Github and improvising upon feedback received from mentors.

## ACHIEVEMENTS

- Placed Top 10 Among 48 other teams in Hackmanv6 -July 2023
- First Place in Web Wizards Web Development Contest - February, 2023
- First Place in Extempore Competition in InBlooms organized by Christ University - April,2023

## VOLUNTEER EXPERIENCE

- **Point Blank** Bengaluru, India  
*Member of an elite multidisciplinary team of programmers from DSCE.* Jan 2023-Present
- **LITSOC, DSCE** Bengaluru, India  
*Member of the Literary Society of Dayananda Sagar College Of Engineering.* Jan 2023-Present