

Kunal Singh

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 [Kunal Singh](#) |  [kunalsingh1718](#) |
Bhubaneswar, India

OBJECTIVE

Enthusiastic and detail-oriented fresher with a strong foundation in both Backend Development and VLSI (Very-Large-Scale Integration). Proficient in modern web technologies such as Node.js, Express.js, and databases, alongside solid academic knowledge of VLSI design principles and hardware description languages like Verilog. Passionate about building efficient and scalable backend systems, while also exploring innovative solutions in digital circuit design. Committed to continuous learning and eager to contribute to dynamic, cross-disciplinary teams.

INTERNSHIP

• Hindustan Aeronautics Limited

June 2024 - July 2024

Intern Trainee

Karnataka, India

- Developed analysis of industrial machinery, in predictive maintenance and fault detection.
- Conducted analysis on sensor data and maintenance logs, identifying critical patterns in machinery wear and tear.
- Presented findings at the Internship Presentation Event, receiving recognition for innovation in predictive maintenance.

EDUCATION

• Centurion University of Technology and Management

July 2021 - Ongoing

BTech

Bhubaneswar, India

- CGPA: 8.95/10.00

• DAV Public School, Dhori (Intermediate)

2018-2020

CBSE

Bokaro, India

- Grade: 85%

• DAV Public School, Dhori (Matriculation)

2016-2018

CBSE

Bokaro, India

- Grade: 83.8%

PROJECTS

• Gesture Controlled Virtual Mouse:

Tools: [HTML, CSS, Javascript, Python]

- Implemented OpenCV and MediaPipe for real-time hand tracking, achieving high accuracy and smooth user experience.
- Created a hand movement tracking component, ensuring seamless interaction with the virtual environment.
- Applied image processing and feature extraction methods to analyze gesture patterns and movement trajectories.

• Traffic Data Analysis:

Tools: [Python, Pandas, NumPy, Matplotlib, Seaborn, Jupyter Notebook]

- Implemented Python and Pandas for data processing and analysis, achieving a 20
- Created a data visualization dashboard using Matplotlib and Seaborn, ensuring clear insights into traffic trends and peak hours.
- Applied statistical analysis and machine learning algorithms to analyze traffic congestion, vehicle count, and flow patterns.

SKILLS

- **Programming Languages:** C/C++(Proficient), Java, Python 3, Matlab
- **Web Technologies:** HTML, CSS, JavaScript, React.js, Node.js, Express.js
- **Database Systems:** MongoDB, PostgreSQL
- **Data Science & Machine Learning:** Python, Pandas, NumPy, Scikit-learn, TensorFlow, Matplotlib
- **DevOps & Version Control:** GitHub
- **Specialized Area:** VLSI Design, Verilog, SystemVerilog
- **Mathematical & Statistical Tools:** MATLAB, R

CERTIFICATIONS

• Introduction to Internet of Things - Elite + Silver

MAY 2024

• HackerRank: [HackerRank problem solving](#)

JUNE 2024

ADDITIONAL INFORMATION

Languages: English (Proficient), Hindi (Native), Odia (Beginner)

Hobbies: Chess, 2D 3D Animation