

ARYAN JAISWAL

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EDUCATION

SRM Institute of Science and Technology

B.Tech, Electronics and Communication Engineering — CGPA: 7.69

Ghaziabad, India

2023 – Present

Basant Valley Public School

Delhi-NCR, India

Senior Secondary (XII), PCM — 71%

2023

Secondary (X) — 91.3%

2021

PATENT

Brain-Controlled Robotic Hand with Adaptive Artificial Intelligence and Haptic Feedback

2026

- Design registered and granted by the Patent Office, Government of India, under the Designs Act, 2000 (Design No. 504827-001; Certificate issued 27/08/2026).
- Co-inventor, listed with SRM Institute of Science and Technology, on a registered design ("Smart Bionic Hand") for an AI-driven, brain-controlled prosthetic/robotic hand with adaptive control and haptic feedback.

PROJECTS

Comparative Study of 6T and 8T SRAM Cells under Low-Voltage Operation

Ongoing

VLSI Research Project | Cadence Virtuoso

- Comparing 6T and 8T SRAM cell architectures, focusing on memory-cell behaviour and design trade-offs at low supply voltages.
- Designing schematics and running transistor-level circuit simulations in Cadence Virtuoso.

RLC Frequency Response Simulator

Feb 2026 – April 2026

Python, Flask, React.js, NumPy

- Designed and developed a full-stack circuit simulation platform supporting series and parallel RLC network analysis through REST APIs.
- Implemented frequency-domain and transient-response algorithms to compute resonance characteristics, quality factor (Q), bandwidth, and sensitivity analysis.
- Created an interactive drag-and-drop schematic editor with real-time Bode plot visualization and automated SPICE netlist generation.

Smart Asthma Guardian

Jan 2026 – Feb 2026

Wearable Healthcare Project | Arduino UNO R4, IoT

- Developed a wearable monitoring system for air quality and vital signs with real-time alerts for hazardous conditions.

Long Range Wireless Environmental Monitoring

Aug 2024 – Sept 2024

IoT Project | Arduino, LoRa

- Developed a LoRa-based long-range environmental monitoring system; collected and processed sensor data in real time.

Benefit AI

Jan 2026 – Present

AI & Full Stack Project | Python, Flask, ML, Next.js

- Developed Python backend modules for recommendations and automation; integrated ML models with data pipelines and REST APIs.

TECHNICAL SKILLS

VLSI / EDA: Cadence Virtuoso, schematic design, circuit simulation, SPICE netlists, SRAM cell design

Circuit Concepts: Transistor-level analysis, frequency response, Bode plots, low-voltage design trade-offs

Languages: Python, C

Libraries: Pandas, NumPy, Matplotlib

Web / Database: HTML, CSS, JavaScript, React, SQL, MongoDB

Concepts: REST APIs, JSON, Data Analysis, Automation, Git, Debugging

Hardware: Arduino, ESP32, LoRa, IoT Systems

HACKATHONS & COMPETITIONS

- Hack04 Quantum Computing Challenge — SRM KTR Campus (Top 5 Position)
- Wire Wizard Competition — IIT Jodhpur (Top 5 Position)

CERTIFICATIONS

- AI Certification (Coursera), UI/UX Certification (GUVI & HCL)
- Gen AI Powered Data Analytics

LEADERSHIP & ACTIVITIES

- President, Electronica@SRM
- Vice President, NSS Cell – SRMIST