# Avinash choudhary

Indian Institute of Technology, Goa

Graduate, **Mechanical engineering**
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Github: **My Portfolio**

## Education

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|---|---|---|
| **BTech, Mechanical engineering** , IIT Goa | CGPA : **6.83/10** | 2021 – 2025 |
| **Class 12, RBSE**, Matrix high school, Rajasthan | Aggregate: **96.80** % | 2020 – 2021 |
| **Class 10, RBSE**, Matrix high school, Rajasthan | Aggregate: **91.50** % | 2018 – 2019 |

## Experience

**Mechanical Research Intern at Karban Envirotech Pvt Ltd** (Jan – May 2025)

*Product Development, Product Testing*

- Worked on CAD design, rapid prototyping, prototype testing and evaluation, and manufacturing processes for industrial product development
- Led the design of a heater unit for a bladeless ceiling fan — including feasibility analysis, prototyping, testing, and integration planning
- Assisted in the design and experimental validation of an air conditioning testing setup to support the initial phase of the AC project
- Collaborated with cross-functional teams to optimize C++ control code for PCB-based system, enabling smooth hardware-software integration

## Projects

**Advanced Tableau Dashboards for Sales & Customer Analytics | GitHub**

*Tableau, Data Visualization, Business Insights*

- Designed and implemented executive-ready Tableau dashboards with dynamic filters, navigation buttons, and year-over-year KPI tracking, enabling sales leaders to monitor performance, product trends, and customer contribution.
- Translated complex business requirements into interactive dashboards and actionable insights, strengthening data-driven decision-making on sales strategy and customer engagement.
- Extracted key business insights, and provided recommendations to optimize sales strategies and drive revenue growth.

**Insights on Global Layoffs (2020–2025) via SQL Analytics | GitHub**

*SQL, Data analysis*

- Developed an end-to-end SQL workflow for data ingestion, cleaning, transformation, and advanced querying to enable comprehensive analysis
- Standardized inconsistent fields, handled missing data, removed duplicates, and structured raw datasets into analysis-ready formats
- Conducted exploratory analysis to assess data quality and identify patterns across industries, geographies, funding stages, and company-specific layoff trends
- Extracted actionable insights from cleaned data and visualized key trends to support data-driven business decision-making

**Understanding Material Removal Mechanics Through FEM Simulation | Prof. Priyabatra Sahoo** (Aug – Dec 2024)

*FEM simulation, Research*

- Conducted FEM simulations to study about the impact of nano-scretching process on a metallic surface
- Investigated stress-strain behavior and plastic deformation to understand material response under cutting conditions
- Analyzed simulation outcomes to derive meaningful research insights in the field of nano-scratching and presented findings to a panel of Mechanical Engineering professors for academic evaluation.

## Skills

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| **Technical Skills** | SQL, Tableau, Excel, Microsoft Power Platform, Microsoft Visio |
| **Business Analysis** | BPMN, ERDs, Service Blueprinting, Requirements Documentation |
| **Project Management** | Stakeholder Management, Project Planning, Risk Management, SDLC methodologies, Agile Frameworks |
| **Soft Skills** | Communication, Leadership, Analytical Thinking, Problem Solving |

## Positions of Responsibility

**Overall Coordinator, Annual Sports Festival | Chakravyuh 2023 | IIT Goa**

- **Led** a 13-member team to organize Chakravyuh, IIT Goa's **7-day** sports festival, engaging **1100+ participants** across **10 events**
- **Spearheaded** end-to-end planning and on-ground execution, delivering all events on schedule under tight deadlines
- Achieved a **100% increase** in overall participation over the previous edition through
- Introduced a structured volunteer framework to enhance coordination across departments and ensure seamless event operations

**Indoor Sports Secretary | IIT Goa** (Aug 2022 – July 2023)

- **Led** all indoor-sports operations on campus, **heading** a team of 6 sports representatives and **organizing 7+** major events (**500+** participants)
- **Devised participation growth strategies**, doubling female turnout and **increasing** overall sports-fest attendance **by 70%**, while **implementing** a new sport-wise representative model to streamline execution.
- **Founded and led** the campus e-sports club, fostering **sustained engagement** and hosting e-sports tournaments with **200+** participants
- **Negotiated a 50%** increase in the annual sports budget, enabling procurement of new equipment and **hiring** of additional coaches

## Certifications

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| **Microsoft Business Analyst Professional Certificate** | (May – July 2025, Coursera | Microsoft) |

## Extracurriculars & Hobbies

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| **Sports** | • Captain of college Badminton team<br>• Gold medalist in 4x100m relay |
| **Miscellaneous** | • Guided four students on Nano-Scratching FEM Simulation project<br>• Hobbies: Sports, Travelling, Learning |