

# Yash Kataria

Roll No.: 210102100

B.Tech - Electronics and Communication Engineering

Indian Institute of Technology Guwahati

yashkataria.org

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### EDUCATION

Degree/Certificate	${\bf Institute/Board}$	CGPA/Percentage	Year
B.Tech. Major	Indian Institute of Technology, Guwahati	7.24 (Current)	2021-Present
Senior Secondary	Central Board of Secondary Education	95.8%	2021
Secondary	Central Board of Secondary Education	93.8%	2019

### EXPERIENCE

#### • Perpetuum Innovations Pvt. Ltd.

May 2024 - July 2024

Gurugram, IN

 $Software\ Engineering\ Intern$ 

- Developed an Admin Tool for the Spilll app, empowering the team to manage and oversee operations for 1000+ users.
- Improved operational efficiency and user support through the internal tool, facilitating better oversight and management.
- $\circ \ Implemented \ features \ to \ \textbf{blacklist/whitelist users}, \ manage \ invitations, \ \textbf{send notifications}, \ and \ handle \ content \ storage.$
- o Integrated a caching mechanism using Cloudinary, achieving an 85% reduction in the application's response time.

#### Projects

• Techniche Website

November 2023 - August 2024

Techniche - The Annual Techno-Management Fest of IIT Guwahati

techniche.org

- o Developed a robust and responsive website using React.js and Node.js to establish Techniche's online footprint.
- Designed and implemented an optimized MySQL data storage solution for handling event registrations from 300+ cities.
- o Deployed the website on an AWS EC2 instance, with continuous vulnerability checks and monitoring against cyber attacks.
- Attracted 10k+ unique visitors and 700k+ views on the website monthly before the event with zero downtime.

### • Jotion - Cloud-Based Document Management

December 2025

Personal Project

- jotion-yash.vercel.app | GitHub
- Built a rich content editor using Next.js, supporting dynamic text and image content for complex document creation.
- o Integrated Clerk for secure authentication with Google and GitHub, utilizing Convex for real-time database operations.
- Implemented nested notes in a tree-like structure, dynamic headings, and options for trashing or permanently deleting notes.
- Enabled **one-click web publishing** of notes, allowing users to effortlessly share their work online.

### • Know Shop App - On Campus Order Hub Gold Medal Solution - Software PS Kriti 2023

January 2023 - February 2023

know-shop-apk | GitHub

- Developed a mobile application that connects users with shops around the IITG campus, enabling pre-ordering items.
- Implemented separate customer and shopkeeper interfaces using **Flutter**, providing them a user-friendly experience.
- $\circ \ \text{Integrated} \ \textbf{live} \ \textbf{order} \ \textbf{updates} \ \text{and} \ \textbf{QR} \ \textbf{Code} \ \textbf{Verification} \ \text{mechanism} \ \text{to} \ \text{enhance} \ \text{customer} \ \text{engagement} \ \text{and} \ \text{ensure} \ \text{reliability}.$
- o Utilized Firebase for efficient backend data management, ensuring real-time updates and secure data handling.

### • Facial Recognition on a FPGA

January 2024 - April 2024

Prof. Gaurav Trivedi, Department of EEE, IIT Guwahati

Report

- $\circ \ \text{Implemented a facial recognition system using } \textbf{ResNet-18} \ \text{on a Nexys A7100T FPGA board, boosting real-time performance.}$
- Accelerated the last layer CNN computations with FPGA-based parallel processing, ensuring reduced latency.
- o Integrated UART for data transfer between FPGA and external devices, and achieved 96% accuracy on the test set.

### TECHNICAL SKILLS

• **Programming**: C/C++, Python, JavaScript

• Web Development: React.js, Next.js, Node.js

• App Development: Flutter\*

- Database Management: MySQL, MongoDB, ArangoDB
- Operating Systems: Windows, Linux\*
- Miscellaneous: Git, GitHub, AWS\*, Bash\*

\* Elementary proficiency

### ACHIEVEMENTS

- Kriti 2023: Secured 1st position among 13 hostels in the Software Development Problem Statement for Kapili Hostel.
- Codeforces: Rated Specialist on the competitive programming platform with a max rating of 1452. (Handle danklord786)
- LeetCode: Achieved a maximum contest rating of 1776 along with maintaing a streak of 230+ days. (Handle -yashkataria15)
- Google Code Jam Farewell Round A 2023: Secured Global Rank 2387 among 8000+ participants.
- Joint Entrance Examination(Advanced) 2021: Stood among top 10 percent students out of 1.41 lakh students.

# KEY COURSES TAKEN

- Computer Science: Data Structures and Algorithms, Computer Networks, Introduction to Computing
- Machine Learning: Pattern Recognition and Machine Learning, Recommendation System Design Using Deep Learning
- Mathematics: Linear Algebra, Probability and Random Processes, Multivariable Calculus, Differential Equations
- Electronics: Digital Circuits, Signals and Systems, Embedded Systems

## Positions of Responsibility and Extra Curriculars

• WebOps Head, Techniche IIT Guwahati

- November 2023 September 2024
- Led a three-tier team of over 20 developers in ideating, implementing and managing web portals for Techniche.
- Led a team of 400+ volunteers to provide logistics and infra support for 50k+ visitors across 40+ events on campus.
- $\bullet\,$  Guwahati Half Marathon, India's largest student organized marathon

 $April\ 2024$ 

July 2024

- $\circ$  Organized the **14th edition** of the Guwahati Half Marathon aimed to raise public awareness for a **cleaner tomorrow**.
- Coordinated with campus administration and local authorities to provide a fluid experience to 4000+ participants.
- Technothlon, India's largest student organized logic-based examination
  Revamped the prestigious national level high school aptitude based examination after a four year hiatus.
  - Spearheaded the development of the web portal to ensure a frictionless examination experience for 15.1k+ students.