# Yash Kataria

# **EDUCATION**

#### Indian Institute of Technology Guwahati

November 2021 - July 2025 (Expected) CGPA: 7.23/10.0

Bachelor of Technology in Electronics and Communication Engineering

EXPERIENCE

• Perpetuum Innovations Pvt. Ltd.

Software Engineering Intern

May 2024 - July 2024

Gurugram, IN

- o 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.
- o Implemented features to blacklist/whitelist users, manage invitations, send notifications, and handle content storage.
- o Integrated a caching mechanism using Cloudinary, reducing the application's average response time from 1s to 153ms.

**PROJECTS** 

• Techniche Website

November 2023 - August 2024

Techniche - The Annual Techno-Management Fest of IIT Guwahati

techniche.org. in

- 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.
- Deployed the website on an AWS EC2 instance with ongoing vulnerability checks and cyberattack monitoring.
- Attracted 10k+ unique visitors and 800k+ views on the website monthly before the event with zero downtime.

### • Jotion - Cloud-Based Document Management

December 2023

Personal Project jotion-yash.vercel.app | GitHub o Built a rich content editor using Next.js, supporting dynamic text and image content for complex document creation.

- 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 to move to trash or delete permanently.
- 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

Prof. Gaurav Trivedi, Department of EEE, IIT Guwahati

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.
- o Implemented separate customer and shopkeeper interfaces using **Flutter**, providing them a user-friendly experience.
- o Integrated live updates and a QR code verification mechanism to enhance engagement and ensure reliability.
- Utilized Firebase for efficient backend data management, ensuring real-time updates and secure data handling.

# • Facial Recognition on an FPGA

January 2024 - April 2024

Report | GitHub

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

# TECHNICAL SKILLS

Programming languages: C/C++, Python, JavaScript

Database Management: MySQL, MongoDB, ArangoDB

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

Operating Systems: Windows, Linux\*

App Development: Flutter\*

Miscellaneous: Git, GitHub, AWS\*, Bash\*

ACHIEVEMENTS

\*Elementary proficiency

- 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 a daily streak of 300+ days. (Handle -yashkataria15)
- Google Code Jam Farewell Round A 2023: Secured Global Rank 2387 among 8000+ participants.
- Joint Entrance Examination(Advanced) 2021: Ranked in the top 10 percent students out of 250k+ shortlisted students.

#### Relevant Coursework

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, Computer aided applied optimization

**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.
- $\circ$  Led a team of 400+ volunteers to provide logistics and infra support for 50k+ visitors across 40+ events on campus.
- Guwahati Half Marathon, India's largest student organized marathon

April 2024

- o Organized the 14th edition of the Guwahati Half Marathon aimed to raise public awareness for a cleaner tomorrow.
- $\circ$  Coordinated with **campus administration** and **local authorities** to provide a fluid experience to 4000+ participants.
- Technothlon, India's largest student organized logic-based examination

July 2024

- Revamped the prestigious national level high school aptitude based examination after a four year hiatus.
- $\circ$  Spearheaded the **development** of the web portal to ensure a frictionless examination experience for 15.1k+ students.