

# Akhil **Computer Science & Engineering**

Indian Institute of Technology, Kharagpur

18CS10070 **B.Tech** Male

Examination	Institute	Year	CGPA/%
Graduation	IIT Kharagpur	2018-2022	8.93
Intermediate/+2	Cambridge School Rewari	2017-2018	93%
Matriculation	Cambridge School Rewari	2015-2016	10.0

# **INTERNSHIPS**

• Software Development Summer-Intern | *Intuit India* 

(May'21-July'21)

- Worked on designing a new approach for **workload-distribution process** for the TurboTax service
- Used Machine Learning algorithms like regression for workload estimation model and created a distribution model to distribute the expert specific workload which reduced the customer serving time and improved expert utilization.
- o Received Pre-Placement Offer (PPO) with Excellent performance feedback during my summer internship
- Software Development Co-Op Intern | *Intuit India*

(Jan'22-Present)

Worked on APIs with back-end technologies like Spring-Boot and Java for a internal chat platform.

#### AWARDS AND ACHIEVEMENTS

- Achieved academic excellence and got Department Change to Computer Science, by securing an Institute Rank 11 (among 1400 students) and department Rank 1 (among 60 students) in 1st year.
- Secured a rank of 88 (IIT Kharagpur college rank-2) among 3500+ participating teams in the ACM-ICPC Amritapuri 2020 Preliminary Round and a rank of 106 in ACM-ICPC Amritapuri 2020 Regionals Round.
- Secured Global Rank 421 in Round-A of Google KickStart 2021 among 19000+ participants (Username:akhilchoudhary)
- Max rating of 1983 on CodeChef and 1689 on CodeForces platform (Handle: akhilchoudhary)
- Achieved a rank of 102 (among 12000+ participants) in Codeforces round 690.
- Achieved a rank of 80 (among 2000+ participants) in Codechef March Cook-off.

#### **B.TECH THESIS**

• Biometric Security and Multiparty Authentication

(B.Tech Project | Guide: **Prof. Debasis Samanta**)

- Worked with functioning and testing of some of the cryptographic hash functions like MD5, Blake-2 and SHA-256
- Working on the web-app based implementation of biometric-based multi-user authentication system

# **COURSE PROJECTS**

• Mind-Match | Software Engineering, (CS29006)

(Jan'20-May'20)

- o Developed a Web Application using a MongoDB database, NodeJS as backend and Bootstrap for frontend, that helps in matching like - minded people in the community with similar interests and hobbies.
- Employed industrial software development techniques including preparation of Software Requirement Specification (SRS), Data FlowDiagram(DFD) and Unified Modeling Language (UML) diagram.
- o Technologies Used: Backend Node[S | Frontend HTML5, CSS3, Bootstrap | Database MongoDB
- Project Allocator | Database Management System, (CS43002)

(Mar'21-Nov'21)

- Developed a web application using NodeJA and MySql database to facilitate CGPA prioritized project allocation
- o Tech Stack: Backend NodeJS | Frontend HTML5, CSS3, Bootstrap | Database MySQL
- Hands Free Game Simulator, (ET60029)

(Aug'20-Dec'20)

- Simulated the functioning of arrow keys of computer by detecting face movements using image processing
- **Technologies Used**: python, open-cv, pyqt5 design tool.
- Linux shell | Operating Systems, (CS39002)

(Mar'21-Nov'21)

- Implemented an interactive Linux shell in C that runs as an application program using system calls like fork(), wait(). Supports piping, redirection, history, pwd indication and builtin commands like ls, echo, cd, etc
- Peer-to-Peer Chat Application | Networks Lab, (CS39006)

(Mar'21-Nov'21)

Implemented a terminal based local network chat application which works on socket programming and system calls.

## SKILLS AND EXPERTISE

- Proficient: C, C++, JavaScript, Python, HTML, CSS, MySQL, Data Structures and Algorithms, Web Development
- Familiar: Java, Verilog, OpenCV, Bootstrap, Git, Socket Programming, Wireshark, MIPS, Shell Scripting

## POR & EXTRA-CURRICULARS

• Mentor: Mentored 4 first year CSE students, guided them on academic/extracurricular fronts. (Aug'21-Present)

- NSS Unit Leader: Led a team of around 35 freshmen and 30 sophomore students in awareness rallies, cleanliness drives. Taught Maths and Science subjects to class 6 to 9 students, conducted quizzes and interesting competitions. Got Bronze medal for teaching performance of Unit's literary team. (*Ian'19-Dec'19*)
- Core Team Member (Inter IIT Sports Meet, IIT Kharagpur) Spearheaded a 10 crew member team to organize a 9-day sporting extravaganza for Event Management and Accommodation. Collectively organized 548 sporting events, 9 cultural nights and 8 guest lectures with an overall participation of 3000+ students (Sept'19-Dec'19)