

# Abhijay Mitra

Department of Electrical Engineering

Final Year Undergraduate at Indian Institute of Technology, Kharagpur

<https://abhj.github.io/public-portfolio/> | <https://www.linkedin.com/in/abhj/>

## EDUCATION

B.Tech	Institute	Grad Year	CGPA
Major → Electrical Engg. (Instrumentation) Minor → Computer Science and Engg.	IIT Kharagpur, India	2022	8.98 / 10 9.10 / 10

## INTERNSHIPS

### Software Engineering Intern | SALESFORCE

Summer' 21

- Aimed to **recognize, analyse and store data automatically**, directly from **medical voice conversations**.
- Developed a prototype app for **healthcare registrars** that mitigated their role in **registering, updating or fetching patient details**.
- Executed automatic conversation with patient (through phone call) without any manual intervention from registrar except confirmation of the patient **data analysed from the conversation** before saving the data, for update or new patient registrations.
- Integrated **Google Speech to Text** and **Einstein NER** APIs to eradicate requirements of any manual intervention in the process.
- Languages** used → Java, Javascript, **Frameworks** used → Spring Boot

### Software Engineering Intern | PROFICIENT VISION SOLUTIONS

Winter' 19

- Aimed to **remove rain and fog** from **HD video streams** in **real time**.
- Developed license for product** (encryption of machine details like MAC Id, hard disk id, date of installation) along with user provided details such as id, password, number of concurrent users, and unique details cameras to be granted access.
- Implemented the **RSA algorithm** from scratch for licensing the software, built the pre-processing steps of the fog removal code.
- Incorporated **histogram equalisation** and **stretching**, in **CUDA C** to enhance speed of computation multiple folds.

## COMPETITIONS

- Won the InTurn Hackathon** organized by **Salesforce** for its interns. 2021
- Globally Ranked 311** in Round E in **Google KickStart** 2021
- Globally Ranked 70** in **April Lunchtime Division 2** organised by Codechef 2021
- Globally Ranked 42** in **Summer Code Challenge** held at Codechef 2021
- Globally Ranked 101** in **June Cook-Off 2021 Division 2** organised by Codechef 2021
- Globally Ranked 443** in Round D in **Google KickStart** 2020
- Qualified for **Facebook Hacker Cup - Round 2**. 2020
- Finalist of **Overnite Kshitij IIT Kharagpur**, a night long **ACM certified** team competitive programming contest 2020
- Globally Ranked 5** in June Data Structure and Algorithms Contest and **10** in August Easy organized by **Hackerearth** 2020

## AWARDS and ACHIEVEMENTS

- Expert** with max rating **1877** on Codeforces ( id → [abhj](#)). 2021
- 5 star** with max rating **2030** on Codechef ( id → [abhj](#)). 2021
- Secured All India Rank **2157 (99.9 percentile)** in **JEE Advanced** 2018
- Secured Rank **92 (99.9 percentile)** in **WBJEE**. 2018

## SKILLS and EXPERTISE

- Languages :** C, C++, Java, Python, Kotlin, Apex, SOQL, SOSL, HTML5, CSS, MATLAB, CUDA C, Javascript, TypeScript, Octave, PHP, Assembly Language (AVR Micro - controller)
- Platforms:** Salesforce, Github, Heroku
- Databases:** PostgreSQL, MongoDB, MySQL
- Frameworks:** Spring, Spring Boot, Maven, Spring MVC, React JS, JQuery, Express JS, Hibernate, Bootstrap, Thymeleaf, Lightning Web Components, Aura Components
- Others:** Git, REST API, Bulk API, SOAP API, Postman, XAMPP, SOAP UI, Node JS, Open CV, Software Development Life Cycle, AWS, Metamind Einstein, Amazon Comprehend, Google Cloud, Multithreading, Number Theory, Cryptography, Image Processing, Computer Vision, Parallel Programming, Web Development, Machine Learning, Competitive Programming, Amazon Web Services, Computer Architecture, Operating System, NP Algorithms