# Abhijay Mitra

Department of Electrical Engineering

Final Year Undergraduate at Indian Institute of Technology, Kharagpur

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### **EDUCATION**

B.Tech	Institute	Grad Year	CGPA
Major → Electrical Engg. (Instrumentation)	IIT Kharagpur,	2022	8.92 / 10
Minor → Computer Science and Engg.	India		9.10 / 10

### **INTERNSHIPS**

#### **Software Engineering Intern | Salesforce**

Summer' 21

- Aimed to recognize, analyze 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 analyzed 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 equalization** 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 organized by Codechef	2021
Globally Ranked 42 in Summer Code Challenge held at Codechef	2021
• Qualified for <b>Facebook Hacker Cup - Round 2</b> .	2021
Globally Ranked 101 in June Cook-Off 2021 Division 2 organized by Codechef	2021
Globally Ranked 443 in Round D in Google KickStart	2020
• Qualified for Facebook Hacker Cup - Round 2.	2020
• Finalist of <b>Overnite Kshitij IIT Kharagpur</b> , a night long <b>ACM certified</b> 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 → <u>abhi</u> ).	2021
• <b>5 star</b> with max rating <b>2030</b> on Codechef ( id $\rightarrow$ <u>abhi</u> ).	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, HerokuDatabases: 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