# PRABHAT SINGH

#### Indian Institute of Technology, Guwahati

@ https://leetcode.com/u/Prabhat\_iitg/
@ https://www.geeksforgeeks.org/user/vishalsinghgpl/

#### **EXPERIENCE**

#### Software Engineer | Xhipment

₩ March 2023

- Designed and implemented APIs for charge code, vendor management, and shipment execution.
- Developed a PDF invoice generation feature for both customer and admin portals on Xhipment.com.
- Built a real-time shipment status export feature in Excel for the admin portal.

#### Software Engineer | Esper

## July 2022 - Dec 2022

- Built a CLI tool for Esper Cloud API for sanity checks, reducing manual debugging time by 40%
- PagerDuty daily and weekly incident summaries for Slack channels using Jenkins, improving incident management efficiency.
- Built and optimized Esper's backend services with Skyfall integration in Tesseract, and automated CI/CD pipelines using Jenkins.
- Collaborated in an Agile development environment, actively participating in sprint planning, daily stand-ups, retrospectives, and sprint reviews.

## **PROJECTS**

#### Custom E-Commerce Platform | Full-Stack Application

₩ Oct 2023

 Built a MERN-based eCommerce platform with JWT authentication, PayPal/credit card payments, and an admin dashboard for managing orders, products, and users. Implemented product search, reviews, ratings, pagination, and a dynamic carousel.

Tech Stack: React, Node.js, Express, MongoDB, JWT, PayPal API

#### Real-World Backend for a Bootcamp Directory Application

## July 2023

Built DevCamper, a robust backend API for a bootcamp directory.
 This project covers RESTful API development, authentication, authorization, database management, geospatial queries, file uploads, and security best practices.

Tech Stack: Node.js, Express, MongoDB, Postman.

#### Testing And Verification of Autonomous Aircraft Taxi.

# June 2022

 Worked on testing and verification of autonomous aircraft taxiing in cyber-physical systems, identifying bugs, detecting adversarial attacks, and analyzing deep neural network (DNN) efficiency, robustness, and internal structure.

Tech Stack: Codeocean, NNV, Matlab, Python

#### Multi-stage DNS Resolving System

May 2021

 Developed a two-stage DNS resolver system to resolve domain names to IP addresses and vice versa, optimizing query processing and DNS server communication.

Tech Stack: C++, Socket Programming

## **EDUCATION**

M.Tech in Computer Science
 Indian Institute of Technology, Guwahati

🛗 Sep 2020 - Jun 2022

B.Tech in Computer Science
Institute of Engineering Technology,
Lucknow

### **SKILLS**

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

Frameworks & Libraries: Node.js, Django, Express, React

Databases: SQL, MongoDB (NoSQL)

DevOps & Tools: AWS, Docker, Jenkins,

Git, Postman

## **COURSEWORK**

- Data Structures & Algorithms
- Database Management System
- Artificial Intelligence
- Operating Systems
- Design And Analysis of Algorithms

### **ACHIEVEMENTS**

 GATE 2020: Secured 99.03%ile among 100K candidates appearing for the test. Teaching Assistant: CS-110 Computing Lab in Dept. of CSE, IIT Guwahati

Placement Volunteer: Worked as a Placement Volunteer in placement cell 2020-

21, IIT Guwahati