### UTKARSH SHARMA, OHIO USA

(614) 496-7685 | sharma.1339@osu.edu | Linkedin | Portfolio | FullStack Project | LeetCode | Java | Springboot | React

### **EDUCATION**

### THE OHIO STATE UNIVERSITY

Columbus, Ohio

Master of Science in Computer Engineering (4.0 / 4.0, Top 1% among 200 students)

Aug 2023 - May 2025

• Project Work: Vehicle Integration, Code Automation; SAE / GE, Buckeye AutoDrive Challenge II

# INDIAN INSTITUTE OF TECHNOLOGY (IIT) KANPUR | Ranked 4th best in India

Master of Science (3.7 / 4.0, Top 2% among 500 students)

Kanpur, India Aug 2020 - June 2022

Research Work: Surrogate Modeling For Composite Damage Analysis Using Deep Learning

### PROFESSIONAL EXPERIENCE

### **LARSEN & TOUBRO INFOTECH** Spectra-An ETL based Product

Bangalore, India

Senior Software Engineer | Java | Spring Boot | React | Docker | Kubernetes

July 2022 – July 2023

- Designed and developed Full-Stack for customer-off boarding by analyzing existing codebase, interviewing senior architects and building feature requirements for databases, Kubernetes pods and RabbitMQ; reducing DB management costs by \$100k.
- Implemented product installation and update journey by shadowing DevOps to understand current capability, reading multiple pre and post deployment plans and automating the process using bash; reducing deployment time by 50%.
- Led the team to adopt agile methodologies like daily scrum, sprint, retrospective and a novel mentorship model to improve development efficiency of team; improving developer team velocity by 3 story points per sprint.
- Spearheaded **regression testing framework** by inspecting current testing strategy, understanding testing requirements and evaluating multiple technologies; Carried out **Selenium based regression tests to reduce on-call incidents by 10%.**

### TATA CONSULTANCY SERVICES

Remote

DevOps Engineer Intern | Jenkins | Docker | Kubernetes

July 2020 - Oct 2020

- Executed an automated CI/CD pipeline using Jenkins, Docker, and Kubernetes, decreasing deployment time by 10%; ensuring seamless delivery of software updates to a large-scale production environment serving over 1 million vital customers.
- Engineered a Python deep web-crawler; computed product-centricity scores by publisher's domain with 86% accurate search results.

### PERSONAL PROJECTS (10+) | GITHUB

### INTERACTIVE SORTING VISUALIZER

• Constructed a **Full-Stack React application** for making sorting algorithms visually intuitive and interactive by rendering a react element dynamically changing the UI in real time; elevating user's **visual experience of sorting algorithms by 60%**.

### **COMPILER FOR A PROGRAMMING LANGUAGE**

• Engineered a series of tokenizers and compilers by following grammar rules, semantic and syntactic notations; ensuring an abstract & semantic analysis with compiler level code optimizations resulting 15% faster code compilation.

#### **ENIGMA MACHINE**

• Examined and implemented code for Enigma machine, first built during World War II, by understanding rotor's motion and behavior to incoming signals for encrypting/decrypting messages; integrated with APIs for WhatsApp provided by Twilio.

#### **MINESWEEPER GAME**

Created a fully functional user interactive "Minesweeper Game"; published a mobile application on Google Play-Store, 2020.

### **GITLET - A MINI VERSION OF GIT**

• Built a Mini version of Git including git init, git add, git commit, git log using encoding & Hashing for commits with an accuracy of 98%. VEHICLE MOTION ANALYSIS USING DEEP LEARNING

• Fabricated an application to study motion of moving vehicles on road by considering different traffic scenarios, utilizing bounding regions, optic flow and deep learning; achieving a commendable accuracy of 85% in intricate road conditions.

## **TECHNICAL SKILLS**

- Languages: C, Python, Matlab, HTML, CSS, JavaScript, Scala, NodeJs
- Technologies: Spring, Spring Boot, Spark, REST, JUnit, AWS, JSON, PyTorch, Keras
- Databases: SQL, MySQL, PostgreSQL, Sqlite, Azure, Snowflake, ElasticSearch, MangoDB, Salesforce
- Tools: Git, JIRA, Intellij, Maven, Hadoop
- Academic Courses: Operating Systems, Database Management Systems, Algorithm Design & Analysis, Computer Architecture, Data Mining, Computer Vision, Artificial Intelligence, Web Technologies, Statistics and Machine Learning, Intro to Neural Networks
- MOOCS: "Deep Learning for Coders" (Fast.ai), "Machine Learning" by Stanford University (Coursera), RESTful Api and Micro-services

# LEADERSHIP & AWARDS

- Achieved All India Rank 738 among 300,000 students in Gate examination 2020.
- Attained 2nd Position among 200 students in Mathematics Olympiad, 2018.
- Delivered over 100 impactful lectures on Java & Data Structures, preply.com.
- Secured **3rd position in the Musical Band** at Association of Indian Universities.