

# SHUBHAM TIWARI



## EDUCATION

Thapar Institute of Engineering and Technology, Patiala  
Bachelor of Engineering in Computer Science Engineering, GPA: 8.06/10  
Shaheed K P S Inter College, Devaria Churamani, Gonda  
Intermediate, Percentage: 87.2%

India  
July 2019- July 2023  
India  
July 2016 – July 2018

## WORK EXPERIENCE

### Data Engineer



Python, GCP, Apache Beam, SQL, Bigframe, Pandas, PostgreSQL

Sept. 2023 – Now

- Developed ETL pipeline at lower cost strategy by removing cloud Dataproc & cloud composer.
- 6.4 million files coming on daily basis and need to be transform and ingest into BigQuery tables.
- Performed different POC with cloud scheduler, pubsub, dataproc and dataflow batch & streaming pipeline
- Saving 30% cost ~\$1M pa for 10 customers by implementing an optimal, scalable and efficient solution. Performed production load testing.
- Lead wholesome project of 5-member team from blueprint to production deployment by appropriately allocating resources and IAM.

## PROJECT EXPERIENCE / OPEN SOURCE

### Internship @Ericsson India Global Services

Python, Google cloud platform (GCP), Big Query & other GCP services, SQL,

Jan. 2023 – Jul. 2023

- Problem area overspending, lack of automation and security and compliances.
- Proof of concept for a **lightweight data ingestion and aggregation pipeline** using cloud run, cloud function, eventarc, GCS.
- Designed solution for automation that can reduce cost, time, efforts, and other resources. And can predict service degradation in advance.
- Have MNC work culture experience, teamwork, professionalism, solved real-time problems, gained debugging skill.

### DURI – Digital Universal Remote Interface Research Paper + PATENT



Python, Computer vision, Nvidia Jetson Nano kit, MediaPipe, PyQt5, Autopy

March 2022 – July 2022

- Innovated an AI based software for public computers using that people can interact with computer by their fingers before the camera with the **accuracy of 98%**.
- Objective is to prevent from spreading **COVID-19 like diseases** by avoiding touching the same **public computer (i.e. ATMs)** by people.
- Proposed interface for controlling robots and **Reduces 90% manufacturing cost of mouse and keyboard.**

### Lakhan Mitra: Book to eBook



Python, OpenCV, Tesseract OCR, PyQt5, Django, HTML, CSS

Nov. 2021 – July. 2022

- Created a solution for people **to make eBooks from the hard copy of books** of any language e.g., Tamil, Telugu, Urdu, Sanskrit, etc.
- Scan the book it will convert into an eBook for people. **Save 90% time in typing** Only need is formatting.
- Monitored **more than 100 languages** are supported to preserve book's literary value.2

## TECHNICAL SKILL

### Programming Languages:

Python, C, C++, PHP *Familiar with* Scala, R(Basic), Dart, JavaScript, C#

### Databases:

BigQuery, MySQL, PostgreSQL, SQLite3 *Familiar with* PL/SQL (Procedural Language)

### Libraries/Framework:

Pandas, NumPy, Seaborn, Matplotlib, MediaPipe, OpenCV, Scikit-Learn, TensorFlow, Big Query

### Frontend

HTML, CSS, Bootstrap

### Backend

Flask, Django, PHP, Apache Beam

### CI/CD & IaC

Terraform, Jenkins, GitLab, Automation script for redeployment

### Competitive Programming/Problem Solving

5\* on *HackerRank* and 3\* on *Codechef*

### GCP & useful tools

Compute, Billing, Storage services, GIT, DBeaver, Azure, AWS, Linux, Maya2020, Docker, container

## POSITION OF RESPONSIBILITIES/EXTRA CURRICULAR ACTIVITIES

- Rotaract Club of TIET | Marketing head** (2020-2022).
- Mathematics Teacher** of class 9th-12th @ Unique Academy 1.5+ years' experience (March 2020 – Sept. 2021).
- Voluntarily organized art & singing competitions** in the rural area and **motivated students** toward science and education.
- Part-time video content creators to help the people. Having 20M+ views.

## HONOR & AWARDS

- Ranked 242** among 25000+ coders **globally** in Codechef august long challenge 2021.
- 1<sup>st</sup> Marketing head** of Rotaract Club of TIET.
- Got **1<sup>st</sup> position in District** in class 12th- **Awarded by District Magistrate.**
- Led most college projects and managed up to **7-member teams**

## CERTIFICATIONS

|   |            |                      |
|---|------------|----------------------|
| Getting started with AI on jetson nano                | Nvidia     | <a href="#">link</a> |
| Fundamental of Accelerated Computing with Cuda Python | Nvidia     | <a href="#">link</a> |
| Google cloud digital leader certification             | Udemy      | <a href="#">link</a> |
| Problem Solving (Intermediate)                        | HackerRank | <a href="#">link</a> |
| Google Cloud Certified Professional Data Engineer     | Google     | <a href="#">link</a> |
| Learn Ethical Hacking from Scratch by Zaid Sabih      | Udemy      | <a href="#">link</a> |