

# Puru Singh

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## EDUCATION

### Graphic Era Deemed to be University

Bachelor of Technology, Computer Science, GPA: 8.73

Dehradun, UK

2020 - 2024

## WORK EXPERIENCE

### Data Engineer at Genpact

Business Analyst Gen-AI

Bangalore, KA

Oct 2024 – Current

- Developed, migrated, and optimized ETL pipelines from PostgreSQL (Greenplum) to SparkSQL and Python (PySpark) on Databricks, improving job runtimes by up to 80% through logical flow enhancement and Spark-specific optimizations.
- Designed and orchestrated robust end-to-end workflows using Apache Airflow, Python scripts and Databricks jobs and workflows with its native features to ensure scalable, reliable, and efficient data processing.
- Collaborated with cross-functional teams to streamline the migration process across Ingestion, Transformation, and Visualization layers—including Dashboards and Data export/delivery jobs.
- Addressed complex data engineering challenges during platform modernization and contributed to the stability and scalability of the new data ecosystem by developing Connection modules and Task specific frameworks using Python.

### Internship at Genpact

Hyderabad, TL

Data Analyst and Gen AI Intern

Feb 2024 – July 2024

- Leveraging Generative AI, Developed an automation script using Python (LangChain) to generate summaries of large financial reports (10-K), optimizing control flow and prompt engineering, resulting in a speedup of over 85% from previously used solutions.
- Created a Financial Health Dashboard for Consumer Banking using Microsoft Power BI, aggregating all income sources and spending, providing a comprehensive financial overview and suggestions to meet goals at a glance.
- Gained experience on Data cleaning, Data preprocessing, and creating insightful dashboards to extract valuable insights.

### Internship at Defense Research and Development Organization (DRDO)

New Delhi, DL

Android Development and Security Intern

Jul 2023 – Aug 2023

- Developed a background Android app using Kotlin, Jetpack Compose, and services like NotificationListenerService to capture and automatically forward system notifications from user-specified applications via SMS.
- Implemented a Jetpack Compose UI to configure a recipient phone number and display a real-time, on-screen log of forwarded activity.
- Conducted static and dynamic security analysis using MobSF, reducing testing time by 70% and identifying critical flaws.
- Gained proficiency in core Android components such as Background services, Runtime permissions, and System-level APIs like SmsManager.

## PROJECTS

### Loocle – A Self-Hosted Photo Backup and Web App (Google Photos Inspired)

- Engineered a self-hosted photo management system replicating Google Photos' backup and viewing experience, running entirely on local devices without any cloud dependencies.
- Built a Python Flask web application and HTTP server for browsing, uploading, and managing photos with fast metadata-based search and caching.
- Automated wireless Android backups using ADB over Wi-Fi, enabling seamless syncing between mobiles and a personal computer.
- Integrated facial recognition features using multi-shot classification for identifying and searching people in photos.
- Implemented automatic metadata tagging to associate detected faces with person names, enhancing organization and quick retrieval.
- Focused on privacy-first architecture, automation, and system reliability, ensuring zero reliance on third-party cloud services.

## ACHIEVEMENTS

### Top 50 in Coursera's first Employment Hackathon

Online - Jan 2023

### 3rd Position in Intel's OneAPI Hackathon - Machine Learning, SYCL Programming

IIT Roorkee, UK - Mar 2023

## ADDITIONAL

**Technical Skills:** Python, Flask, Apache Spark, Apache Airflow, Databricks, SQL, AWS, REST APIs, C++, Kotlin, Microsoft Power BI, Excel, Generative AI (LangChain, RAGs, Ollama), Machine Learning, Automation Scripting

**Domains & Concepts:** System Design, Backend Development, RPA Concepts, ETL Pipelines, Data Engineering, Cloud Infrastructure, Facial Recognition, Computer Vision

### Certifications & Training:

Databricks - Data Engineer - Professional, Data Engineer - Associate, Generative AI Engineer - Associate,

AWS - DEA-C01 Certified Data Engineer - Associate, CLF-C01 Certified Cloud Practitioner, Microsoft - AI-900 Azure AI Fundamentals

**Languages & Interests:** English (Fluent), Hindi (Fluent) | Fast Touch Typing (172 WPM, Top 7%), Reading, PC Gaming, Beatboxing