

# Trush Patel

Hatfield, PA | 267-367-2133 | trushp097@gmail.com | trushresume.web.app | github.com/trushpatel97

## Summary

AI and Cloud Data Engineer with 3+ years of experience building AI solutions and managing data pipelines on Google Cloud Platform. Proven track record of reducing manual effort by 98%, improving system efficiency, and solving complex problems. Building on these achievements, now leveraging modern AI tools to reduce development time while maintaining project security.

## Experience

### AI Engineer | Tata Consultancy Services | Dec 2023 - Sep 2024

Developed an AI-driven email responder for package inquiries using OpenAI and historical data

- Automated email inquiries using OpenAI, reducing initial response time from hours to seconds by engineering prompts
- Enforced PEP8 standards across Python codebases using Pylint, improving code quality and reducing time for all developers
- Led development of a package-tracking API, coordinating with 2 developers and QA engineers to ensure reliability through 50+ Postman test cases

### Cloud Data Engineer | Tata Consultancy Services | Sep 2021 - Aug 2023

Became a certified Google Cloud Data Engineer and handled billions of data for a client

- Designed ETL pipelines on GCP, migrating over 2 billion records daily from Oracle to BigQuery for a major client
- Automated Python validation for 250+ Oracle and BigQuery tables, reducing quarterly workload from 3 months to a day
- Configured GCP services (Cloud Functions, Pub/Sub, BigQuery, etc.) with cross-functional teams for deployments

### Eye Disease Detection Research | Temple University, PA | May 2020 - Jan 2021

Utilized Machine Learning to classify the presence of eye diseases in images using Python

- Trained a TensorFlow CNN on 85,000+ eye images to classify diseases, achieving 97.9% test accuracy across four datasets
- Enhanced the model's predictive accuracy by 3.8% through hyperparameter tuning and data augmentation techniques

## Skills

**Languages:** Python, JavaScript, Java, C/C++, MATLAB

**Frameworks & Tools:** React, Express, Flask, Django, Pandas, NumPy, Scikit-learn, TensorFlow, Google Colab, OpenAI API

**Cloud & Data:** Azure, GCP, SQL, Striim, Knex

## Projects

### Celebrity Look-alike | Personal Project | Mar 2021 - Jun 2021

Developed a full stack React web app to match celebrity look-alikes via image URL submissions

- Built a full stack React/Knex app using Clarifai API to compare an image against 10,000+ celebrity faces
- Implemented backend with Node.js, Knex.js, and PostgreSQL to store login information and add rate limits
- Deployed Frontend, Backend, and PostgreSQL on render to allow for communication

### Chalkboard | Temple University, PA | Sep 2020 - Dec 2020

Web-based collaboration platform that enables users to draw and have video calls simultaneously

- Implemented a Picture-to-Picture Web API to enable screen sharing of any application/tab
- Integrated Color Pickr API for color manipulation of shapes, pen, and text on HTML canvas
- Selected and presented at Temple University's Research Symposium

### Story Spinner | Temple University, PA | Mar 2020 - May 2020

Web application that generates stories from various categories using NLP

- Created a web application using a Django backend to generate unique stories from selected categories via NLP
- Utilized Word2Vec to analyze text from articles, compute word weights, and to generate summaries

## Education

### Temple University | Philadelphia, PA | Dec 2020

*Bachelor of Science in Computer Science*

### Google | Google Cloud Platform | Dec 2021

*Associate Cloud Engineer*