

Sujit Patel

Phone: +917745971630 Email: sujitpatel0202@gmail.com GitHub: /sujitpatel22 LinkedIn: sujit-patel-85078723b

PROFESSIONAL SUMMARY

- 2+ years experience in creating scalable web applications with Django, Python desktop applications, creating Machine learning models, visualizations and working on Linux.
- 2+ years experience in creating object-oriented applications with Python and C++ & Data structures and algorithms.
- Certified in Linux from IBM and web development with Django & SQL from Harvard University.
- Notable works include (but not limited to), projects showcase and sharing platform & social network site.
- Enhancing expertise in Dockers and Microservices.

PROJECTS

Retrieval Augmented Generation System (Python, Pinecone DB, Google API, Django) May 2024

- Created context-query search system using google search API and vector database.
- Scored 89% accuracy, leading to a 45% reduction in false positives; Implemented vector similarity search, enhancing machine learning model with BERT fine-tuning on SQuAD.
- Increased user experience by 1.4x by reducing average result time to 0.4 sec for 2 048 tokens.
- Designed a responsive interface with Django for query search with download result option.

Explainable AI: Grad-CAM and scene detection (TensorFlow, Python, NumPy) April 2024

- Created a gradient visualization system for analysing feature weights in an image for classification.
- Trained a ResNet model for feature extraction on Microsoft dataset with 17034 original and 17034 augmented examples in 6 classes.
- Added a custom training loop with classification layers to extract gradient channels for visualization.
- Achieved 94% training accuracy and 92% validation accuracy with cross validation set.

Social networking platform (Django, Python, SQLite3, JavaScript, HTML, CSS) May 2022

- Deployed a social networking site, offering user login, account managing, post sharing & feedbacks.
- multiple user login sessions allowed.
- Integrated CSRF verification for secure API routing to backend.

SKILLS

Core skills: MySQL, SQL, Linux, Azure, Machine learning, Deep learning, Neural Networks, LLM fine-tuning

Programming languages: C++, Python, Object oriented programming, HTML, CSS

Frameworks/Libraries: Django, Pandas, TensorFlow, Keras, Scikit-learn, NumPy, Matplotlib, Seaborn

Soft skills: Strategic Thinking, Collaboration, Cognitive Flexibility, Communication

CERTIFICATIONS

Statistical learning for machine learning	(Illinois Tech, In progress)
Python for Data Science and Machine Learning (Harvardx CS109x)	(Harvard University, July 2024)
Deep Learning specialization & Advance TensorFlow	(DeepLearning.AI, May 2024)
Databases with SQL and MySQL (Harvardx CS50)	(Harvard University, Nov 2023)
Web development with Python (Harvardx CS50)	(Harvard University, June 2022)

EDUCATION

Bachelor of Computer Applications (BCA) - Amity University, Madhya Pradesh 2022 - 2025
CGPA: 8.51 / 10

X, XII - ST. Joseph's School (ISC), Singrauli, Madhya Pradesh 2019 - 2021
Percentage: 83.3%