

B. Patel

Software Engineer with expertise in Machine Learning.

EDUCATION

AHMEDABAD UNIVERSITY

BTECH IN INFORMATION AND

COMMUNICATION TECHNOLOGY

07/17 - 05/21 | Ahmedabad, India

CGPA: 3.17/4.0

IELTS

11/2021 | Ahmedabad, India

Overall Band: 7.0

Reading: 7.5 & Listening: 7.0

Speaking: 7.0 & Writing: 6.5

SKILLS

PROGRAMMING

• Python • C • SQL

TOOLS

• AWS (EC2, S3, SQS, Transcribe)
• AWS SDK • Kubeflow
• Docker • Kubernetes
• Airflow • Tensorflow-Extended
• Keras • Tensorflow
• OpenCV • Git/GitHub
• Streaming protocol (RTMP, RTSP)
• FFMPEG • Android Studio

TECHNICAL SKILLS:

• Generative Networks
• Machine/Deep Learning
• Statistical analysis
• Time series modeling • Data pipeline design
• Database Management
• Distributed Systems
• Data processing & visualization
• Data Structures • Algorithms

CERTIFICATION

COURSERA

• Introduction to Data Science in Python
• Applied Machine Learning in Python
• Applied Plotting, Charting, and Data Representation in Python
• Named Entity Recognition using LSTMs with Keras
• Image Super-Resolution Using Autoencoders in Keras
• Anomaly Detection in Time Series Data with Keras
• Introduction to Deep Learning
• AWS Solution Architect SAA-C02 (Ongoing)

EXPERIENCE

DETECT TECHNOLOGIES | JR. STAFF AI ENGINEER

11/22 - present | Chennai, India

- Responsible for developing and implementing a robust TFX pipeline for computer vision tasks with a focus on building a fault-tolerant, scalable MLOPS pipeline incorporating Continuous Integration/ Development/ Training/ Monitoring process.
- Developed a dockerized cloud video transcoder for converting video in different formats.
- **Tech Stack** : Python, Airflow, Tensorflow Extend, Docker, TF Serving, Tensorflow, FFMPEG

TRUMINDS SOFTWARE SYSTEMS | SOFTWARE ENGINEER

07/21 - 11/22 | Gurgaon, India

- ML Model Benchmarking Project
 - Worked on developing quantitative & benchmarking reports for the next-gen ML inference hardware using MLPerf benchmarking methodology for computer vision models.
- MLOps Platform development
 - Responsible for developing ML model pipeline for the time series data using Apache Kafka, Kubernetes, Airflow, and tensorflow extended.
 - Revamp the existing MLOps architecture to accommodate continuous training and monitoring.
- **Tech Stack** : Python, Kubeflow, Airflow, Tensorflow Extend, MLflow, Kubernetes, Docker, Apache Kafka, Faust, MLPerf, Model Quantization tools, Android development & profiling, CNN, MobileBERT, TensorRT, JetPack SDK

TRUMINDS SOFTWARE SYSTEMS | SOFTWARE ENGINEERING INTERN

12/20 - 05/21 | Gurgaon, India

- Designed and implemented a data pipeline to integrate two pre-trained deep learning models that could serve 2000+ students simultaneously using AWS services such as SQS, S3, EC2, and Transcribe.
- Improved speaker detection accuracy by 25% by integrating noise suppression model.
- Implemented throttling to reduce resource consumption by 10%.
- **Tech Stack** : Python, AWS (SQS, S3, EC2, Transcribe, Seceret Manager), FFMPEG, OpenCV, Tensorflow, GitLab, DLIB, RTMP, Boto3

OIZOM | DATA SCIENCE INTERN

05/20 - 07/20 | Ahmedabad, India

- Implemented Inverse Distance Weighting (IDW) for multivariate interpolation of scattered data points.
- Design and automated test cases for the algorithm and address changes to remove points of failures.
- **Tech Stack** : Python, AWS EC2, Cassandra, Redis, MongoDB

SOFT SKILLS

- Mentoring
- Story Telling
- Leadership
- Communication
- Collaboration
- Creative Thinking
- Problem Solving

CONNECT

- [Website](#) • [LinkedIn](#) • [GitHub](#)

PUBLICATIONS

- [1] B. Patel, "Dual cnn autoencoder based lossy image encoding and decoding," in *15th International Conference on Machine Vision*, 11 2022.
- [2] H. Patel, A. Parikh, and B. Patel, *Autoencoder-Based Model for Detecting Accounting Statement Fraud*, pp. 11–21. 01 2022.
- [3] B. Patel, D. K. Patel, B. Soni, M. López-Benítez, and S. Kavaiya, "Lstm autoencoder aided estimation of primary activity statistics under imperfect sensing," in *2021 International Conference on COMMunication Systems NETWORKS (COMSNETS)*, pp. 242–245, 2021.

WORKSHOPS

- Trained 500+ students & professionals on python, machine learning, and deep learning as a Google ML Facilitator.
- Invited as Machine Learning SME in multiple hackathons such as Hacktoberfest, Hack the Mount hackathon, and Ingenium.
- Invited to conduct a session MLPerf AI Inference Benchmark with ML professionals as the target audience.
- Mentored 20+ aspiring ML professionals through one-to-one guidance as Machine Learning mentor at Career Leap.
- Selected as one of the 300 participants from 45 countries to attend Deep Learning + Reinforcement Learning organized by CIFAR and Montreal Institute for Learning Algorithms.

AWARDS ACHIEVEMENTS

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| 2022 | Communication and System Officer for Mars analogue Crew-238 at Utha, USA |
| 2021 | TruFreshMinds Award for excellent performance |
| 2021 | Student of the Year Award - 2021 from Ahmadabad University. |
| 2019 | Google Explore Machine Learning Facilitator |
| 2019 | Young Reporter for Environment at Denmark, Europe |