Nitin Bhore

Sr. AI ML Engineer (Lead) / Lead Data Scientist

9021222453 | Mumbai

nitinbhore3@gmail.com

linkedin.com/in/nitin-bhore

Google.scholar

Skills

Python
Machine Learning
Natural Language Processing (NLP)
Deep Learning
Object Detection
Document Artificial Intelligence
GitLab
GitHub
Git
Flask
SQL
Postman
Docker
Windows
Linux
Google Cloud Platform Services (GCP):

- Vertex AI
- Cloud Storage
- BigQuery
- Cloud Function
- Document AI
- Natural Language
- Cloud Source Repositories

Summary

Results-driven Senior AI/ML Engineer (Lead) and Lead Data Scientist with **over 9 years** of experience in both **real-world applications** and **research.**

Proven expertise in delivering end-to-end solutions in **machine learning**, **deep learning**, **natural language processing** and **artificial intelligence** across diverse domains, including **Banking, Insurance, Finance, Healthcare, Bioinformatics and Digital Media**.

This experience spans interdisciplinary research and contributions to high-performing, **Agile-oriented software delivery** teams in both professional services and product-based organizations.

Highly motivated and passionate about continuous learning, I am actively seeking opportunities to contribute my best for the growth of my employer. I thrive in fast-paced, research-driven environments with a dedicated focus on designing advanced technology solutions.

Experience

Sr. AI ML Engineer (Lead) / Lead Data Scientist Dec 2022 - Present

Rigved Technologies

Roles and Responsibilities:

- ★ Implemented effective stakeholder management strategies to ensure alignment with project goals and objectives.
- ★ Facilitated seamless client interaction, addressing their needs and fostering strong relationships throughout project execution.
- ★ Developed and introduced innovative solutions and strategic approaches to efficiently address intricate business challenges, enhancing overall project success.
- ★ Led cross-functional teams through the entire development lifecycle, from client requirement gathering to architecture development and from development and testing to deployment, maintenance and continuous improvement of technology solutions and models.
- ★ Provided leadership to a dedicated team of 12+ professionals, overseeing project planning, maintaining work product quality, executing project tasks and ensuring timely project delivery. Conducted project reviews to enhance efficiency and uphold excellence standards.

Amazon Web Services (AWS)

- Sagemaker
- Simple Storage Service (S3)
- Elastic Compute Cloud (EC2)
- Elastic Block Store (EBS)
- CodeCommit
- Lambda Function

Soft Skills

Research

Analytical thinking

Team Building & Leadership

Project management

Team management

Client relationship management

Methodologies

Agile

CRISP-DM

Publication

Bhore, Nitin and Dr. Shridhar Page. (2020). "**Innovative Approach for the Application of Machine Learning Techniques in Mobile Payment Fraud Analytics.**" Presented at the 5th International Conference on Innovations in IT and Management (ICI2TM - 2020).

Link to the paper:
https://lnkd.in/fRCGt3a

Projects:

Digital Asset Management

Digital Asset Management (DAM) system leverages machine learning, deep learning, natural language processing and object detection to streamline the storage, analysis and retrieval of digital assets such as **images, videos, audio and documents**. It enables the extraction of information from these digital assets and stored the extracted information in the database.

Senior ML Engineer (Sr. Data Scientist) Feb 2021 - Dec 2022

Quantiphi Analytics Solution Private Limited

Roles and Responsibilities:

- ★ Worked closely with the architecture team to create the end-to-end pipeline of the ML components.
- ★ Research and implement appropriate statistical modelling and machine-learning algorithms with data mining and unstructured data analytics.
- ★ Propose solutions and strategies to business challenges.
- ★ Managed a team of 4 people.

Projects:

Prospectus Classification and Entity Extraction from Prospectus

Prospectus Classification and Entity Extraction from Prospectus

Applied Natural Language Processing techniques to classify documents as prospectuses or non-prospectuses, with a primary focus on entity extraction from unstructured prospectuses.

Identified and meticulously categorized key elements (entities) from the text, encompassing issuer, dealer, arranger, guarantor and various others.

Organized and storedS the extracted entities in a BigQuery table facilitating further analysis and processing.

Face Recognition for Employees

This project involved the successful design and deployment of advanced face recognition systems, utilizing deep learning and neural networks. The solutions developed contributed to enhanced security and access control, exemplifying cutting-edge technology expertise.

Invoice Classification

Classify the invoice or non-invoice pages from documents (.pdf) from different vendors. Most vendors have a unique structure of Invoice pages (i.e. no standard format or template).

The rule-based classifier is used to classify the Invoice or non-invoice pages. The rule-based classifier works on the keywords that most frequently occur on Invoice pages.

Proficiently extract key and value pair entities from invoices, encompassing

Certifications

Certificate of **Professional Machine Learning Engineer** issued by **Google Cloud.**

Certificate of Publication for **Research Paper** titled: 'Innovative Approach for Application of Machine Learning Techniques in Mobile Payment Fraud Analytics' issued by Our Heritage Journal, UGC Care Listed, with an **impact factor of 6.8.**

Certificate of **Machine Learning** Course Completion with a **grade of 96%** by Prof. Andrew Ng, issued by **Stanford University**.

Certificate of Examination for **General Insurance Licentiate** issued by the **Insurance Institute of India (III).**

Test Scores

Ranked 91 in the Centre for Development of Advanced Computing – Common Admission Test (**CDAC-CAT**) conducted by the Centre for Development of Advanced Computing (**CDAC**) - Jan 2017.

Successfully passed the Actuarial Common Entrance Test (**ACET**) conducted by the Institute of **Actuaries of India (IAI)** in March 2020.

Personal Information

Invoice Total, Invoice Date, First Name and Last Name. These extracted entities are then meticulously structured and stored in a database, enabling streamlined data analysis and insights for client.

Data Scientist Jul 2020 - Jan 2021

Reserve Bank Information Technology Pvt Ltd

Roles and Responsibilities:

- ★ Develop and implement machine learning models to solve business problems.
- ★ Developed and maintained optimal data pipeline architecture.
- ★ Ensure data quality and integrity throughout the analysis and modelling processes.
- ★ Develop a deep understanding of the business context and objectives to align data science initiatives with organizational goals.
- ★ Apply advanced statistical techniques to derive meaningful conclusions from data.
- ★ Provide guidance and mentorship to junior team members.

Projects:

Early Warning System

Worked on an early warning system to determine the level of stress for banks which are likely to go bad so that RBI can take appropriate action on it on time.

Automated Resolution of Consumer Complaints through Topic Modeling

This project focuses on enhancing the consumer complaint resolution process by leveraging automation and advanced clustering techniques. The goal is to develop a system that categorizes and groups consumer complaints using topic modeling.

Associate Managers Sep 2019 - Jun 2020

Reliance General Insurance

Roles and Responsibilities:

- ★ Design and implement deep learning and machine learning algorithms to solve complex business problems.
- ★ Design and build high-quality prediction systems using both traditional Machine Learning and advanced Deep Learning techniques.
- ★ Perform in-depth statistical analysis to uncover trends, correlations and anomalies.
- ★ Work both independently and as part of a team to achieve project goals and deadlines.
- ★ Apply algorithms to practical use cases within the insurance domain, contributing to the enhancement of RGI products.

Date of Birth: 21-Feb-1992
Nationality: Indian
Languages Known: English, Hindi and Marathi

★ Worked on scaling and optimizing Machine Learning systems for efficiency and performance.

Projects:

Driver Score Prediction

This project revolves around predicting the driver score by analyzing driving habits using data collected from telematics devices. Leveraging a dataset gathered from these devices, the goal is to develop a robust predictive model that assesses and assigns scores to drivers based on their behavior on the road.

Policyholder Classification through How-You-Drive (HYD):

This project centers on the multi-class classification of policyholders based on their driving behavior, as captured by How-You-Drive (HYD) information. Using advanced machine learning techniques, the objective is to categorize policyholders into the most relevant classes, reflecting distinct driving profiles. By analyzing HYD data, the project aims to enhance insurance risk assessment, personalize policy offerings and optimize decision-making processes for improved policyholder satisfaction and risk management.

Data Science Researcher

May 2019 - Feb 2020

National Insurance Academy (NIA), Pune

Research:

Innovative Approach for Application of Machine Learning Techniques in Mobile Payment Fraud Analytics

Introduced an innovative approach for the application of machine learning techniques in mobile payment fraud analytics.

The work shown in the research paper conveys a useful and reusable approach that presents an analysis and advanced analytics of the performance of different controls for a typical fraud scheme in a Mobile Banking Service. Worked under the guidance of Dr. Shridhar Page (Head of IT Department - National Insurance Academy (NIA), Pune).

Presented the research paper at the International Conference on Innovations in IT and Management (ICI2TM – 2020).

See Publication here: https://lnkd.in/fRCGt3a

Google scholar link:
https://scholar.google.com/citations?hl=en&user=RgcdHkoAAAAJ

Jr. Research Fellow (Data Science Researcher)

May 2018 - May 2019

Indian Institute of Science Education and Research (IISER), Pune

Roles and Responsibilities:

★ Applied data mining techniques and statistical analysis to predict the critical disease using Machine Learning. Propose solutions and strategies to research challenges.

★ Developed and tested the cloud computing solutions for genomic data

analysis on Amazon Web Services (AWS).

- ★ Assist in the research and development of the teaching content for machine learning and deep learning courses.

Projects:

Prediction of somatic diseases

The challenge lies in developing an accurate predictive model for somatic diseases, particularly cancer, utilizing patient-specific information. Effectively harnessing data to anticipate the onset or progression of these diseases is crucial for early detection and timely intervention, ultimately improving patient outcomes and healthcare management.

Cloud Application

Developed and deployed a cloud application for the students and enabled that application for teaching and assessment the Machine Learning course.

Student Trainee/Intern

Feb 2017 - Jul 2017

Centre For Development Of Advanced Computing (C-DAC), Pune

Roles and Responsibilities:

- ★ Applied data mining and data cleansing techniques on financial data.
- ★ Worked with the team to build prediction models and applications using Machine Learning.

Projects:

Prediction of Loan defaulter

Prediction of Loan defaulter based on account holder information, where one distinguishes between good or bad counterparties in a binary way.

Junior Software Engineer

Sept 2014 - Jan 2017

Softelic Technology

Roles and Responsibilities:

- ★ Writing efficient, maintainable and modular codes.
- ★ Creating and maintaining documentation for code, APIs and software architecture.
- ★ End-to-end model development and production deployment
- ★ Worked closely with the architecture team to create the flow of ML components.
- ★ Explored various research documents to improve accuracy of various models.

Projects:

Bank Cheque Classification and Entity Extraction from Finance Documents

The primary focus was on bank cheque classification and extraction from documents, where deep learning techniques were employed to classify bank cheque pages. Additionally, the project aimed at extracting key entities such as account number, IFSC code and date for comprehensive financial document analysis.

Government identification cards classification

The project employs Convolutional Neural Networks (CNN) to categorize and classify various government-issued identification cards, including Aadhaar, PAN card and Driving License. Leveraging the power of deep learning, the CNN model is trained to accurately distinguish between different types of ID cards, providing a reliable and automated solution for the identification and classification of official docume

Detection of Anti-phishing text messages

This project focuses on using advanced deep learning techniques to identify and flag potential phishing text messages. By analyzing the words and their contextual relationships in the message, the system can determine whether a text is a phishing attempt or not.

Education

Post-Graduate Diploma (Big Data Analytics) 2017 - 2017

Centre for Development of Advanced Computing (CDAC-ACTS), Pune

Grade: A

BE (Computer Science & Engineering) 2011 - 2014

Sant Gadge Baba Amravati University, Amravati

C.G.P.A: 7.21

Polytechnic Diploma (Computer Technology) 2008 - 2011

Maharashtra State Board of Technical Education, Mumbai

Percentage: 65.86

Secondary School Certificate 2007 - 2008

Maharashtra State Board of Secondary & Higher Secondary Education, Pune

Percentage: 59.23