# Deep Shah

Mumbai, India | deepshah3110@gmail.com| linkedin.com/in/deep3110/

## EDUCATION

**Mukesh Patel School of Technology Management & Engineering, India** **Expected: May 2023**
Candidate for Bachelor of Technology in Computer Engineering with *Distinction* (CGPA 3.55/4 | GPA: 3.65/4)

**Mukesh Patel School of Technology Management & Engineering, India** **May 2020**
Diploma in Computer Engineering with *Distinction* (CGPA 3.42/4)

## PROFESSIONAL EXPERIENCE

**Nomura Services India Private Limited, Mumbai, India** **June 2022 – Present**
*Intern, Corporate Technology Services Division*
Nomura is a global financial services group with an integrated network spanning over 30 countries that serves the needs of individuals, institutions, corporates, and governments through its Retail, Asset Management, Wholesale, and Merchant Banking Divisions.

- Building various workflows to automate various operations using Python, Power Bi, and Alteryx.
- Handling releases in Jira and Confluence.

**Nanavati Max Institute Cancer Care x NMIMS, Mumbai, India** **October 2021 – Present**
*Student Researcher*

- Developing a deep learning-based auto-contouring procedure to delineate the parotid glands in the context of head and neck cancers under the supervision of Dr.Kaustav Talapatra, Dr. Deepak Patkar, Dr. Alka Mahajan, and Dr. Manoj Sankhe.
- Led the Ethical Committee approval of the project.
- Led the development of the study proposal and data analysis plan.

**Yeshu Investments, Mumbai, India** **April 2022 – May 2022**
*Data Science Intern*
Yeshu Investments C/O Sushil Financial Services Pvt. Ltd. is a stock brokering firm that offers various services such as share trading, analysis, and research.

- Designed analytical research-based machine learning tools for global markets and commodities companies.
- Created algorithms for production use to identify actional insights from large databases
- Suggested ideas to incorporate Data Science and Artificial Intelligence based solutions to improve the quality of S&P's products and processes.
- Contributed to index-specific projects and deadlines.

**Studio RGB, Delhi, India** **May 2021 – November 2021**
*Full Stack Developer Intern*
Studio RGB is an independent agency that caters to all the brand needs like logo design, web design, and social media.

- Designed a back-end system for the web application using JavaScript, SQL, and Python.
- Translated designer mockups and wireframes into front-end code using HTML5 and CSS.
- Collaborated on front-end widgets and cross-platform optimization using HTML5.
- Collaborated with graphic designers on website development to address both technological and customer needs.

**Gurugram Police Cyber Crime Cell, Gurugram, India** **June 2021 – July 2021**
*Intern*

- Researched Cyber Security laws, SEBI Regulations, Financial fraud, Email Crime, Threat Intelligence, Web Site Hacking, Cloud security, Internet of Things, Cyber Crime Investigation and Intelligence operation, Cryptocurrency scams, Ransomware Detection, and Digital Forensics under the guidance of Dr. Rakshit Tandon.

**C-BIA Solutions & Services LLP, Mumbai, India** **Dec 2020 – May 2021**

*Software Development Intern*

C-BIA Solutions & Services LLP is a Business Analytics company offering Business Analytics Cloud platforms, Services, Customized Solutions, and Training.

- Programmed a smart home system prototype for provisioning of Nordic Devices in a Mesh Network and built an Android Application to control the devices connected in the Mesh Network.
- Built a backend system for university examination records management for a highly esteemed university in the United Kingdom using ASP.net and DevExpress.
- Designed a trading automation project for a stock brokering firm based in Mumbai using C#.
- Summarized on Integration of Higher Education Statistics Agency of Public Universities in the United Kingdom.

## ACADEMIC PROJECTS

**Panacea**

- Developed a blockchain and machine learning-powered centralized electronic healthcare records management system, with key features such as Post-Recovery Comorbidities Prediction using Knowledge Graphs, Drug Recommendation system with the least side effects using Logistic Regression, Medical Named Entity Recognition using Microsoft Azure Machine Learning Services, and Blockchain Medical Certificate Issuing system hosted on Ethereum Ropsten Network.
- Real patient records such as MIMIC – III and Synthea were used for training Machine Learning Models. The average Spearman's Rank Correlation of the proposed comorbidity prediction algorithm was between 0.5 and 1, Drug Recommendation model had a precision of 0.93, F1 of 0.96, AUC score of 0.903, and accuracy of 91.33%.
- Secured First position in the Project Competition organized by the Department of Information Technology, SVKM's NMIMS Mukesh Patel School of Technology Management and Engineering.
- Technologies used: Python, Microsoft Azure, SQL, HTML5, CSS, JavaScript, Heroku.

**EquiStocks**

- Developed a dynamic company analysis dashboard web application that provides all the details of the company listed on NASDAQ with features such as News Sentiment Analysis, Real-Time Portfolio Management, and Stock Close Price Prediction.
- The R-Squared and Mean Squared Error achieved in the Stock Price Prediction Model using Linear Regression is 86.83% and 14.02 respectively.
- Presented in Technical Project presentation in Software Engineering competition, SVKM's NMIMS Mukesh Patel School of Technology Management and Engineering.
- Technologies used: Python, SQL, HTML5, CSS, JavaScript, Heroku.

**MovieStats**

- Developed a real-time interactive website that provides real-time sentiment analysis of IMDB reviews and tweets, and recommendations of any movie user enters.
- The accuracy and F-1 Score of the Sentiment Analysis model Built the Sentiment Analysis model based on Naïve Bayes Algorithm achieved was 98.7% and 0.99 respectively, and the Cosine Similarity of Movie Recommendation System was 1.
- Technologies used: Python, Chart.js, Scikit-Learn, JavaScript, HTML, and CSS.

**Dressmerize**

- Developed an Android-based fashion application to suggest which outfit to wear for a specific occasion to the user based on current fashion trends.
- Technologies used: Android Studio, Java, and Google Firebase.

## PAPERS

**Panacea: A Novel Architecture for Electronic Health Records System using Blockchain and Machine Learning**

- Authored and presented a paper on the same at the 2022 IEEE Sponsored Second International Conference on Advances in Electrical, Computing, Communications, and Sustainable Technologies held on 22nd April 2022 and published in IEEE Xplore.

**A Novel Approach for Post Recovery Comorbidity Prediction using Knowledge Graphs Approach**

- Authored and presented a paper on the same at the 2nd International Conference on Soft

Computing for Security Applications held on 21St April 2022, published Advances in Intelligent Systems and Computing series of Springer.

**An Overview on Security Challenges in Cloud, Fog, and Edge Computing**

- Authored and presented a paper on the same at the 3rd International Conference on Data Science, Computation and Security on 11Th February 2022, published in Lecture Notes in Networks and Systems series of Springer.

**Disease Prediction Based on Symptoms using Various Machine Learning Techniques**

- Authored and presented a paper on the same in the 1st International Conference on Computational Intelligence and Data Analytics held on 8Th January 2022, published in Lecture Notes on Data Engineering and Communications series of Springer.

**A Survey on Applications of Machine Learning Algorithms in Healthcare**

- Authored and presented a paper on the same in 6Th International Conference on Advanced Computing and Intelligent Engineering held on 23Rd December 2021, published Lecture Notes in Networks and Systems series of Springer.

**A Comparative Study on Cloud, Fog, and Edge Computing**

- Authored and presented a paper on the same in the 5Th IEEE International Conference on Electrical, Electronics, Communication, Computer Technologies, and Optimization Techniques on 10Th December 2021, published in IEEE Xplore.

**Predicting and Analysing Global Warming using Artificial Intelligence**

- Authored and published a paper on the same in the International Journal of Scientific Research in Computer Science, Engineering and Information Technology in March-April 2021, Volume 7, Issue 2, ISSN: 2456-3307, UGC Journal No.: 64718.

**Movie Stats: Sentiment Analysis of IMDB Reviews and Tweets of a Movie Using Naïve Bayes Classifier**

- Authored and published a paper on the same in International Journal of Scientific Research & Engineering Trends in January-February 2021, Volume 7, Issue 1, ISSN: 2395-566X.

## TECHNICAL SKILLS

- Programming languages: Python, Java, SQL, C++, C
- Cloud Technologies: Microsoft Azure, Oracle Autonomous Database, Heroku
- Microsoft Power Platform: Power Apps, Power Automate, Power BI, Power Virtual Agents
- .NET Framework: C#, ASP.NET
- Application Development: Android Studio
- Web Technologies: HTML5, JavaScript, CSS
- Other tools: Scikit-Learn, SQL Server Management Studio, Segger Embedded Studio, Selenium

## COURSES AND CERTIFICATIONS

- Oracle Certified: Machine Learning using Autonomous Database Specialist
- Oracle Certified: Oracle Cloud Infrastructure Foundations Associate
- Microsoft Certified: Azure AI Fundamentals
- Neo4j Certified: Professional
- Neo4j Certified: Graph Data Science Expert

## COURSES AND CERTIFICATIONS

- IBM: Machine Learning with Python – Level 1
- IBM: Data Science Tools
- IBM: Data Analysis with Python
- IBM: Data Visualization with Python
- AWS Fundamentals: Building Serverless Applications
- IBM: Cloud Core
- Google: Crash Course on Python
- Coursera Network: Image Processing with Python

**EXTRACURRICULAR ACTIVITIES**

- Coordinator, Placement Cell, Mukesh Patel School of Technology Management and Engineering, NMIMS for managing all student progress, aiding all graduates, and reviewing all placement department procedures.
- Citizen Scientist, NASA, and UC Berkely's "Stardust@home Foils Research Program" for discovering interstellar dust particles sent back to Earth by the Stardust spacecraft.
- Participated in Technical Project Presentation in Software Engineering, NMIMS MPSTME, October 2020
- Ranked in the Top 10 % of the Python Exam conducted by TestDome, London
- Participated in Polarizer-2019 innovative project competition by the Department of Basic Science and Humanities, NMIMS MPSTME
- Participated in Envirotech 2.0 by Department of Chemical Engineering, NMIMS MPSTME.