# Nitya Chowdary Mummaneni

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#### **SUMMARY**

Data Scientist and Software Engineer with a Master's in Computer Science, specializing in Data Science. Proficient in full-stack development, machine learning, and data analysis, with experience in building scalable solutions and enhancing cybersecurity. Skilled in using advanced tools such as SQL, Java, Python, .NET, Angular, PySpark, and Datadog to drive business growth and optimize operations. Demonstrated success in developing innovative machine learning techniques and creating robust data-driven applications. Adept at collaborating with cross-functional teams to deliver impactful results.

#### **TECHNICAL SKILLS**

- Programming Languages Java, Python, .NET, SQL, Angular, React JS, SQL, PHP, C, C++, HTML, CSS,
- Software Utilities Git, Jira Software, SQL Server, Android Studio, AWS, Visual Studio, Spring Boot, Microsoft Office Suite
- Other Technologies Kafka, PySpark, Databricks, PyTorch, NLP, RESTful APIs, Data Warehouse, ETL, CI/CD pipelines, Testing, Documentation, Deployment

#### **EDUCATION**

# The University of Texas at Dallas, USA Master of Science, Computer Science (Data Science Specialization) B.V. Raju Institute of Technology, Hyderabad Bachelor of Technology, Information Technology

3.7/4.0 May 2021 9.03/10

#### **EXPERIENCE**

#### Information Technology Intern, Toyota, USA

June 2023 – August 2023

- Spearheaded the development of an innovative machine learning technique for PCB (Printed Circuit Board) component
  detection, utilizing advanced OCR (Optical Character Recognition) algorithms and the YOLOv5 machine learning model. Given
  the hardware-centric nature of the project, I invested time in understanding the intricacies of PCBs and their components to
  ensure a technically sound and practical approach.
- Working closely with a cross-functional team, I played a crucial role in building the dataset required for training the model. This
  involved collaborating with hardware experts to gather images of PCBs and meticulously annotating these images to create a
  comprehensive dataset. The process included data cleaning, preprocessing, and ensuring the data was suitable for training a
  robust machine learning model.
- Demonstrated strong communication and management skills by regularly presenting updates and results to stakeholders,
  effectively conveying complex technical concepts. My quick learning abilities facilitated the successful completion of the project,
  which honed my data analysis and machine learning skills. Developed and tested a model capable of accurately identifying
  components in PCBs, significantly contributing to Toyota's technological advancements.

#### Software Engineer Intern (Full-Stack Development), InLumon, USA

January 2023 – May 2023

- Architected and developed Angular for frontend design, implementing responsive and dynamic user interfaces. Leveraging .NET and SQL for backend functionality, ensured robust data management and seamless integration between the frontend and backend. Focused on updating these technologies to their latest versions, enhancing security, performance, and maintainability. Throughout the development process, I collaborated closely with clients, providing regular presentations and updates to gather feedback and ensure the solutions met their needs. This iterative approach improved the overall product quality and client satisfaction.
- Working on multiple projects simultaneously, I developed strong multitasking and time management skills. Worked on
  implementing new features and addressing technical challenges, which led to a 20% boost in user satisfaction. Resolved 95% of
  reported bugs by conducting thorough debugging and testing, significantly enhancing application reliability. My technical
  knowledge and dedication to improving the software ensured a stable and high-performing application. By focusing on both
  development and maintenance, I contributed to delivering reliable and efficient solutions that met client expectations.

#### Application Development Associate, Accenture, Hyderabad

July 2021 - December 2021

- Spearheaded the development of robust Spark and Python solutions for comprehensive data analysis within the telecommunications sector. Crafted reliable SQL reports providing deep insights into data usage and subscriber patterns, enabling informed client decisions.
- Collaborated with cross-functional teams to design tailored, data-driven solutions aligning technical solutions with business objectives. Conducted meticulous unit testing to ensure reliability and high-quality standards, resulting in consistently positive client outcomes.

#### Security Engineer Intern, Indian Servers, Vijayawada

May 2021 - July 2021

- Led proactive team in addressing website vulnerabilities, resulting in 30% reduction in threats. Systematically identified and documented security issues, enhancing client satisfaction by 20%.
- Demonstrated expertise in Vulnerability Assessment and Penetration Testing (VAPT), Network Scanning, OSINT, Packet Sniffing, Malware Analysis, Forensic Analysis, and OWASP standards.

## Software Engineer, Cap Gemini, Hyderabad

May 2020 – May 2021

- Developed an end-to-end bus tracking system, encompassing front-end design using interactive HTML and Bootstrap, ensuring a user-friendly experience and responsive interface.
- Implemented Java APIs for seamless integration, facilitating communication between the front-end interface and the back-end SQL database via JDBC technology, optimizing data management and retrieval processes.

## Digital Marketing & Social Media Intern, Techno Excel, Hyderabad

May 2018 - July 2018

- Strategically applied SEO techniques to enhance online visibility and increase website traffic, resulting in a 30% improvement in readability metrics.
- The improved online presence significantly contributed to the company's growth by attracting more visitors, increasing engagement, and ultimately driving business expansion.

#### **PROJECTS**

#### Pharmacy Detection using ML techniques with Big Data

- Identified the discrepancies in the distribution of pharmacies based on factors like Ethnic group, gender etc. throughout USA.
- Trained model and evaluated the number of pharmacies that should be present based on demographic data using scalable ML systems.

#### **Library Management Application, Web Application Development**

- Designed frontend, backend, and middleware (API), implemented a library management application using Java.
- Created a user-friendly interface, optimizing resource accessibility and enhancing library efficiency.
- SailPoint integration streamlined resource checkout and return processes, fortifying data security.

#### **Twitter Sentiment Analysis, Machine Learning**

- Created a sentiment analysis model using Naïve Bayes classifier to classify tweets as positive, negative, or neutral, resulting in valuable insights into public opinion on current events.
- Utilized NLP techniques and Python libraries such as NLTK and scikit-learn to pre-process and analyze large amounts of text data.

#### **CERTIFICATIONS**

- Detecting and Mitigating Cyber Threats and Attacks, University of Colorado, Coursera
- Technical Support Fundamentals, Google, Coursera
- Data Science Specialization, IBM, Coursera