

ABHISHEK POTDAR

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EDUCATION

North Carolina State University, Raleigh, USA

August 2024 - May 2026

Masters in Computer Science

Coursework: Design and Analysis of Algorithms, Software Engineering, Automated Learning and Data Analysis

K.J. Somaiya College of Engineering, Mumbai University, India

August 2018 - May 2022

Bachelor of Technology in Information Technology

GPA: 8.91/10

Coursework: Data Structures, Database Management Systems, Operating Systems, Computer Networking, Artificial Intelligence, Machine Learning, Cloud Computing, Data Mining

TECHNICAL SKILLS

- **Languages:** Python, PySpark, Java, C, C++, SQL, HTML, CSS, JavaScript, PHP
- **Frameworks:** Django, React.js, Angular, Node.js, Express.js, .NET
- **Database:** MySQL, MongoDB, Microsoft SQL Server, PostgreSQL
- **Libraries:** Scikit-learn, TensorFlow, Keras, OpenCV, NumPy, Pandas
- **Tools & Technologies:** Databricks, Azure, AWS, Jira, Git, Docker, Kubernetes, Hadoop, Power BI

PROFESSIONAL EXPERIENCE

Deloitte USI, Mumbai, India

November 2022 - July 2024

Software Engineering Analyst

- Spearheaded the integration of multi-hop architecture in Databricks with PySpark, facilitated seamless data extraction and transformation into the data lake, achieving a 60% reduction in Databricks runtime.
- Developed data pipeline for batch and stream processing, from ingestion to Azure SQL database using Azure Data Factory.
- Derived the key metrics used to evaluate the quality of the generated engine part and the efficiency of the equipment using MS SQL, resulting in a 25% increase in the machine uptime in 6 months.
- Designed and implemented data models and a data warehouse to unify different source systems of a Smart Factory, connecting 130 machines and empowering 700 operators with real-time visual dashboards for enhanced manufacturing oversight.
- Recognized by the client to receive an Outstanding Performance Award at Deloitte USI (July 2023).

K. J. Somaiya College of Engineering, Mumbai, India

January 2022 - June 2022

Project Manager and ML Engineer

- Supervised a college research team to implement YOLO v5 model in a 360-degree camera for object detection and fine-tuned it using a custom dataset to prioritize objects for the visually impaired, achieving an accuracy of 93%.
- Implemented an algorithm for image stitching using OpenCV to convert dual fisheye images from a 360-degree camera to a single equirectangular image to increase the accuracy of object recognition by 15%.
- Integrated text-to-speech using Python to convey the object's position in real-time for the visually impaired.

Arcon TechSolutions, Mumbai, India

January 2021 - July 2021

Software Engineer Intern

- Revamped product's server portal with frontend in Angular 7 communicating to .NET Core backend through REST API.
- Resolved application VAPT points in backend and implemented token authentication for increased security of the app.
- Collaborated with cross-functional teams using Agile methodologies, driving a 10% increase in application load time.

ACADEMIC PROJECTS AND PUBLICATION

Face Recognition Attendance System | OpenCV, TensorFlow, React.js, Django, and MySQL

- Designed a web application of automated attendance marking to eliminate proxy attendance using anti-spoofing.
- Integrated a novel CNN architecture using Keras to classify real and spoof images with 95% accuracy and combined it with blinking detection for effective liveness detection.
- Authored a research paper, named: 'Face Recognition for Attendance System using CNN Based Liveness Detection'; presented at ICACCM 2022 and published in IEEE Xplore, Jan 2023 (DOI: 10.1109/ICACCM56405.2022.10009024).

Pro Soccer Predictor | Django, Scikit Learn, Numpy, Pandas, HTML, CSS, MySQL, Matplotlib, and Seaborn

- Developed a web application to predict football match outcomes using SVM by utilizing historical match data and enhanced accuracy of model by hyperparameter optimization techniques like GridSearch and RandomSearch.
- Integrated skill-based and player-specific statistics in the form of interactive charts for comprehensive user analysis.

Black Friday Sales | Azure, PySpark, MLib, PowerBI

- Imported Black Friday sales data from Azure Blob Storage into Databricks, performed data manipulation using PySpark and trained machine learning models with MLib to predict product purchase prices with 92% accuracy.
- Analyzed data using Azure Synapse Analytics and established a link service to integrate with Power BI for real-time insights.

CERTIFICATIONS

- **AWS** Certified Cloud Practitioner (Sept 2023)
- **Databricks** Certified Data Engineer Associate (March 2023)
- Artificial Intelligence and Machine Learning, **IIT Roorkee** (Jan 2023)