

Princy Sundarraj

Senior Data Scientist | Python Developer | Retail Analytics Specialist

Results-driven Data Scientist with expertise in optimizing retail operations through data-driven insights. Skilled in statistical analysis, machine learning, and predictive modeling to enhance sales, inventory management, and pricing strategies. Proficient in analyzing transactional and customer data to drive profitability and retention. Experienced in building dashboards and scalable data pipelines, empowering merchandising, supply chain, and marketing teams to make informed decisions.



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📞 7338709644

📍 Chennai, India

WORK EXPERIENCE

Data Scientist

Walmart Global tech India

09/2020 - 01/2023

Bengaluru, India

Achievements/Tasks

- Analyzed inventory and sales data to identify trends, optimize stock levels, and reduce overstock or stockouts. Built machine learning models to forecast demand and improve inventory turnover rates.
- Developed dynamic pricing strategies using data-driven insights to maximize revenue and profitability. Ensured data quality through preprocessing and handling inconsistencies in large datasets.
- Created dashboards and visual reports to communicate insights and trends to stakeholders. Worked with cross-functional teams to align inventory and pricing strategies with business goals.
- Identified actionable insights to improve operational efficiency and support decision-making. Conducted experiments to validate pricing strategies and measure their impact on sales.

Data Scientist - LIMS

PRAGMATIS

09/2016 - 05/2017

Munich, Germany

Achievements/Tasks

- Built a Java-based LIMS application for a government project managing milk quality approvals. Designed the UI using AJAX, HTML, JavaScript, Angular, CSS, and SCSS for efficient functionality and user experience.
- Performed core data science responsibilities for the LIMS statistical project, including data analysis, visualization, modeling, cleaning, model validation, hypothesis testing, and generating insights. Leveraged machine learning and deep learning to analyze product cycles, success rates, and trends for LIMS chips.
- Analyzed LIMS chip FTIR data using ML models, such as deep learning and ensemble trees, to predict dairy adulterants with 98.9% accuracy, surpassing traditional quality test results.

TECHNICAL SKILLS

Programming & Tools

Python, R, SQL, Jupyter Notebook, Apache Spark, Hadoop

Visualization

Tableau, Power BI, Plotly, Dash

Natural Language Processing (NLP)

NLTK, SpaCy, Transformers

Machine Learning and Statistical Knowledge

Supervised and unsupervised learning, deep learning, ensemble methods, Hypothesis testing, regression analysis, time series analysis

Data Wrangling & Cleaning

Preprocessing, feature engineering, outlier detection

Soft Skills

Problem-solving, critical thinking, collaboration, communication

EDUCATION

Master of Science (Specialization : Artificial Intelligence)

Technical university of Kaiserslautern

10/2015 - 12/2018

Kaiserslautern, Germany

Bachelor of Engineering in Information Science

PES Institute of Technology Bangalore.

08/2008 - 08/2012

Bangalore, India

SOFT SKILLS

Communication

Confidence

Creativity

Flexibility

Problem Solving

Self-Management

Teamwork

WORK EXPERIENCE

Research Assistant - Semantic project and Volvo chassis project

Deutsches Forschungszentrum für Künstliche Intelligenz, DFKI

09/2015 - 07/2016

Kaiserslautern, Germany

Achievements/Tasks

- Migrated core web application concepts to a Swift iPhone app, creating a JavaScript-native bridge to utilize exclusive native services.
- Used NLP, Language Modeling, RNN and Semantic analysis for predicting next words and semantic relationships.
- Designed a module for Volvo chassis trucks, enhancing precision and integrating Dynamic Steering to reduce driver strain.

SOFTWARE ENGINEER - Herman Becker International project

WIPRO

06/2014 - 08/2015

Bangalore, India

Achievements/Tasks

- Designed and coded application components of a Navigation system in an Agile/TDD environment utilizing a testdriven development and SDET approach and pair-programming.
- Prepared various automation Test Strategies, Test cases and Test Scripts for Navigation System. Developed and tested Navigation system.
- Developed and optimized features for Harman Becker's infotainment system, enhancing user experience and system performance by implementing advanced software solutions for navigation, multimedia, and connectivity function.

SOFTWARE ENGINEER(Java/J2EE developer) - NetApp MEG and ONTAP project

WIPRO

09/2012 - 05/2014

Bangalore, India

Achievements/Tasks

- Cloud volumes ONTAP (NetApp's official operating system) - Moved Software Defined version of ONTAP so that it is available in some public cloud providers like AWS, Azure, Google Cloud, and IBM Cloud. Thus having ONTAP available to customers as cloud service.
- Design of GUI using Spring Frame Work for the Oncommand system Manager of the ONTAP operating system.
- Developed MEG application using spring framework that leverages model view layer architecture, also configured Dependency Injection.

PERSONAL PROJECTS

Human action and Attentiveness Detection (04/2018 - 06/2018)

- The human action recognition model looks at short videos of humans performing certain actions and tries to classify them based on what the action is and also how attentive the participants are.
- It uses a convoluted neural network trained on a dataset containing short videos and accelerometer data associated with them.

Eye Gaze tracking for the human- Robot Interaction (03/2017 - 07/2017)

- Developed a series of scenarios where human and robot uses eye gaze techniques and hand gestures.
- Developed the software module for this interaction and trained the software module using CNN network.
- Regressive training using different activation function with Machine Learning and deep learning techniques and achieved 89 percentage accuracy.

Imitation Learning in Humanoid Robot ROBIN (11/2015 - 05/2016)

- Bayesian belief networks have also been applied toward forward learning models in which a robot learns without a priori knowledge of its motor system or the external environment.
- Made robot to learn standing sitting and grasping without prior knowledge or situation presented to the robots.

Call out - An Emergency app (01/2012 - 03/2012)

- Designed this Emergency android application which helps people who are in real emergency situation.
- Used c2dm technology , c++, Android open source libraries.

INTERESTS



Artificial Intelligence



Cooking



Fiction



Robotics



Swimming



Travelling