VARTIKA KESARWANI

Data Scientist

CONTACT

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PROFILE SUMMARY

- M.Tech in Computer Science with 5 years of experience, including 2 years full-time and 3 years part-time/internships.
- Specializes in Data Science, Web Development, Python, Machine Learning, and IoT.
- Proven track record as an Assistant Manager, Trainer, Researcher, and Developer.
- Expertise in delivering high-impact solutions.
- Seeking challenging roles in Data Science, Web Development, and Python.
- Aims to leverage skills and make a significant contribution.

SKILLS

Skill	Level
AWS, Azure	60%
SQL, MongoDB	65%
Python, Data Science	85%
Java	65%
Tableau, Power BI	81%
Angular, React	75%

WORK EXPERIENCE

Tech Lead | Find My Tuition   **Dec 2024 - ongoing**
- Leading and managing projects across Full Stack Development, Flutter Development, Generative AI, Data Analytics, and Business Analysis domains, while overseeing technical teams and ensuring successful project delivery.
- Designing and delivering curriculum for national and international batches in Data Analysis, Generative AI, and Data Science, while spearheading projects and training college students and professionals in Python, SQL, Machine Learning, AI, CNN, Tableau, Power BI, Deep Learning, Business Analysis, and Data Science.

Assistant Professor | IIMT University   **Sept 2024 - Dec 2024**
- Taught Artificial Intelligence and guided mini-project sessions for 3rd-year B.Tech students.
- Conducted Deep Learning classes for 4th-year B.Tech students.

Assistant Manager| Emerging India Analytics   **Mar 2024 - Sept 2024**
- Led projects and developed a data science curriculum covering Python, SQL, ML, AI, CNN, Tableau, Power BI, and DL.
- Tracked candidate progress, offered placement assistance, and collaborated with SEO, graphic design, and web development teams.

Data Scientist Intern| Craze Neurons   **Apr 2023 - Feb 2024**
- Created research papers on CNN, Computer Vision, NLP, LSTM, LLM, ML, and DL.
- Collaborated with SEO, content, and graphic teams. Led a team and managed project timelines.

Data Scientist Intern| Celebal Technologies   **Dec 2022 - Mar 2023**
- Analyzed complex datasets using data science tools and techniques to extract valuable insights.
- Applied ML algorithms and statistical models to improve decision-making processes.

MERN Developer Intern | CONAXWEB SOLN. PVT. LTD   **Feb 2021 - Nov 2022**
- Developed web applications with Angular, React and MongoDB.
- Designed and implemented a Hostel Management System and Tutor Management System.

Computer Science Instructor Part Time| Taxtron Institute   **Jun 2020 - Jan 2021**
- Taught Data Science, Python, C/C++, data structures, and algorithms.
- Designed lessons and assessments.

EDUCATION

Galgotias University, Greater Noida
Master of Technology (M.Tech) in Computer Science with 8.9 CGPA 2022 - 2024

Sam Higginbottom University of Agriculture, Technology And Sciences, Prayagraj
Bachelor of Technology (B.Tech) in Computer Science with 75 %
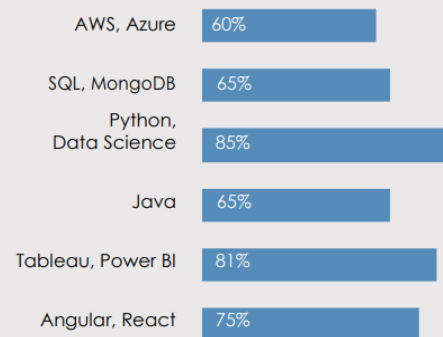2018 - 2022

Delhi Public SchooL, Prayagraj
Senior Secondary (12TH) with 81.7 % in 2017 - 2018
Secondary (10TH) with 76 % in 2015 - 2016

CERTIFICATIONS

Cisco Certified Cloud Security | Jetking Certified Hardware and Networking | Best Tech Certified Python Language | Certified IoT Course | Cisco Certified Programming Essentials in Python | Cisco Certified IoT

ACHIEVEMENTS

Gold Medalist in M.Tech | National Chess Player Certificate | First Position in District Chess Championship | 100% Attendance Trophy | Second Position in Inter DPS Chess Championship

WORKSHOPS ATTENDED

PHP and Python Workshop | Robotic Workshop | Server Workshop | Android App Development Workshop | Artificial Intelligence and Machine Learning Workshop

MEMBERSHIPS

Life member of "Institute for Engineering Research and Publication" (IFERP) - Membership No: PROF-85816783

Life member of "Computer Science Teachers Association" (CSTA) – Membership No: 198358024596

ACTIVE PARTICIPATION

Student Member: 2nd ICCSAI-2023, Galgotias University, Nov 22-25, 2023 (in collaboration with IEEE UP Section).

Technical Member: 1st ICCSAI-2022, Galgotias University, Dec 24-25, 2022 (IEEE Conference #56668).

Student Member: 5th IC2PCT-2024, Galgotias University, Feb 9-10, 2024 (in collaboration with IEEE UP Section).

TECHNICAL SKILLS

Programming Languages: Python , Java , C/C++

Data Science & AI: Machine Learning, Deep Learning, CNN, RNN, SVM, LSTM, GAN, Data Visualization, Generative AI

Web Technologies: HTML5, CSS, JavaScript, Angular, React, Flask, Django, Node.js, PHP, TypeScript

Database Management: SQL, MongoDB

Cloud & DevOps: AWS, Azure

Business Intelligence: Tableau , Power BI

IoT & Networking: IoT System Design, MS Outlook Configuration, Server Management, LAN/WAN, DHCP, DNS, Cisco IoT

Tools & Technologies: Numpy, Pandas, Matplot, Seaborn, Pytorch, Pyspark, Selenium, TensorFlow, Keras, Postman, Git, GitHub, Ubuntu, Linux, Windows Server

Soft Skills: Leadership, Adaptability, Communication, Team Collaboration

RESEARCH PUBLICATIONS

"Combined Framework of CNN and Random Forest Classification in Brain Tumor Categorization using MR Imaging" Link
Published in IEEE Xplore. Achieved 99.61% accuracy on training data.

"UCB (Upper-Confidence - Bound) And Thomson-Sampling Analysis for Advertisement-Selection" Link
Optimizing advertisement selection in digital marketing.

"Advanced Detection of Malicious URLs using Machine Learning" Link
Compared SVM, Random Forest, and Logistic Regression, achieving 96.6% precision.

"Enhanced Stock Market Analysis through LSTM RNN" Link
Achieved 90.4% accuracy by leveraging AI techniques for stock forecasting.

"Empowering Writers with AI: A Streamlit-Driven LLama 2 Blogging Environment"
Integrated Streamlit and LLama 2 for AI-driven blogging.

ADDITIONAL PROJECTS

Attendance Portal - Attendance Management System: Developed a web-based system to track and manage student attendance using HTML, CSS, JavaScript, and PHP.

SpaceSculptor - Smart Parking System (Android App): Designed an Android app with real-time slot monitoring using Firebase and automated entry/exit with IR sensors and LED displays. Tools: Android Studio, Firebase.

WordWarp - Python Puzzle Game: Created a puzzle game in Python using the Tkinter module for graphical interface and user interaction. Tools: Python, Tkinter.

MedAppoint Pro - Online Doctor Appointment Website: Developed a PHP-based platform for online doctor appointments, improving booking processes. Tools: PHP, MySQL.

FitPal - Health and Fitness Android App: Engineered an Android app for health and fitness with features like calorie tracking, heart rate calculation, and step counting. Tools: Android Studio, Java, Machine Learning.

IllumiControl - Smart Room System (Android, IoT): Developed an Android app with IoT integration for remote control of lights and fans, including scheduling features. Tools: Android Studio, IoT sensors.

ProximityGuard - IoT Smart Door System (Android, IoT):Engineered a smart door system with IoT and IR sensors for proximity detection, controlled via an Android app. Tools: Android Studio, IoT sensors.

EcoIlluminate - Smart Street Light System (IoT): Implemented an energy-efficient street light system using IoT and LDR sensors for remote management and optimal illumination. Tools: IoT sensors, LDR sensors.

HostelEase - Hostel Management System: Developed a Python-based system with UPI integration for room allocation, fee management, and student records. Built using Tkinter for the interface and SQLite/MySQL for the database.

DATA SCIENCE PROJECTS

Automated Fashion Product Classifier
- Developed an automated system using web scraping (Selenium) and deep learning (TensorFlow, Keras) to classify Myntra fashion products by gender and sleeve type.
- Achieved high accuracy using CNNs.
- GitHub: Web Scraping and Deep Learning

Simulated AI Agent Group Chat with RAG and External Functionality
- Created a simulated group chat environment using OpenAI API and Hugging Face's Transformers.
- Implemented retrieval-augmented generation (RAG) for QA and code generation.
- GitHub: Autogen

Iris Species Classification with Random Forest
- Developed a Random Forest model to classify iris flower species using the Iris dataset.
- The project involved feature engineering, hyperparameter tuning, achieving 100% accuracy on the test set and a mean cross-validation score of 0.967.
- GitHub: Iris Classification

BLOG CONTRIBUTIONS

AutoGen: A Step-by-Step Implementation Guide
A detailed guide on implementing AutoGen, covering setup, integration, and practical applications. Read the blog here

Short Notes on Large Language Models (LLMs)
Brief insights into LLMs, their capabilities, and their impact on natural language processing. Read the blog here

Exploring Machine Learning Algorithms
A comprehensive overview of popular machine learning algorithms, their use cases, and practical implementation tips. Read the blog here

A Comprehensive Guide to Generative Adversarial Networks (GANs)
An in-depth exploration of GANs, including their architecture, training process, and applications. Read the blog here

Understanding Long Short Term Memory (LSTM) Networks
A detailed examination of LSTM networks, their functionality, and their use in time series prediction and sequence modeling.Read the blog here

AREA OF SPECIALIZATION

Machine Learning and Deep Learning:
Expertise in models like Linear Regression, SVM, Decision Trees, Random Forest, k-NN, CNN, RNN, LSTM, and GAN.
Practical experience in real-world problem-solving and production integration.

Programming Languages:
Python: Proficient in application development and data analysis.
C, C++: Strong in system programming and software development.

Web Technologies:
HTML, CSS, JavaScript: Skilled in web development and design.
Angular, React: Experience in building dynamic UIs.
Flask, Django,PHP: Proficient in web frameworks and server-side scripting.

Database Management Systems:
SQL (RDBMS): Experienced with SQL Server and MySQL.
MongoDB: Proficient in handling NoSQL databases.

Software Engineering:
Design & QA: Skilled in requirements analysis, scalable design, and quality assurance.

Internet of Things (IoT):
Expertise in IoT system design, integration, and security.

DECLARATION

I affirm that the details provided in the above document are true and accurate to the best of my knowledge.
Thank you.
Yours sincerely,
Vartika Kesarwani