Arshdeep S. Ghotra

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Education

Indiana State University, Terre Haute, IN

BACHELOR OF SCIENCE IN COMPUTER SCIENCE, **GPA: 4.0/4.0** *Anticipated May 2025*

Skills

Languages	Python, JavaScript, HTML, CSS, Java, C++, SQL
Data Science Tools	Pandas, NumPy, SciPy, Scikit-Learn, TensorFlow, Keras, Matplotlib, Seaborn
Machine Learning	Supervised Learning, Unsupervised Learning, Transfer Learning, Model Evaluation
Databases	MySQL, PostgreSQL, MongoDB, SQL
Web Development	React, Node.js, Express.js, Flask, RESTful APIs, AJAX, Bootstrap
Tools	Git, Jupyter Notebook, Power BI, MS Azure, Postman, Render, Sublime Text, Visual Studio Code

Experience

Glas-Col, Terre Haute, IN *Oct. 2024 - Present*

IT Intern

- Developed and optimized cloud-based SQL databases by mapping and modifying reports from a standalone server, enhancing system performance and data accessibility.
- Collaborated with the Plant Manager to implement database solutions, ensuring smooth data migration and integration for improved reporting capabilities.
- Gained proficiency in SQL and cloud technologies while generating detailed reports to support decision-making processes, directly aligning with academic objectives in database management.

Cunningham Memorial Library, Terre Haute, IN *July 2024 - Present*

Advanced Library Technology Assistant

- Scraped and processed over 10,000 data files from the university's and online websites, efficiently extracting datasets and exporting them into CSV format to enhance data accessibility.
- Developed a custom automated program for data normalization and cleaning, improving data quality and reducing manual processing time by 60%.
- Managed ongoing upgrades and updates for digital content within established timelines on the university's website, resulting in successful implementation of five major features that improved usability ratings among student users.

Sara Software System LLC, Kansas *May 2022 - June 2022*

Data Analyst Intern

- Processed and cleaned customer datasets (over 500,000 rows), improving data quality by 15% and ensuring reliable insights for decision-making.
- Developed and optimized automated solutions using Python and SQL, reducing reporting time by 30% and improving overall accuracy by 15%, ensuring high data quality for reliable healthcare software systems.
- Created real-time visualizations that were presented to senior leadership, improving team efficiency by 12% through clearer, more actionable insights.

Project

Course Finder *June 2024 - July 2024*

TECH STACK: PYTHON, REACT, HTML, CSS, API, NODE.JS, EXPRESS.JS, POSTGRESQL

- Developed a course recommendation platform with smart filtering, reducing selection time from 10 minutes to 30 seconds by curating personalized learning paths based on user preferences.

Mental Health Chatbot *May 2024 - June 2024*

TECH STACK: PYTHON, MACHINE LEARNING, NLP, REACT, FLASK, CSS, API

- Built a conversational AI chatbot with 92% accuracy in emotional support, demonstrating capabilities to improve user interaction, similar to enhancing patient engagement in healthcare applications.

Movie Recommendation System *July 2024 - July 2024*

TECH STACK: PYTHON, MACHINE LEARNING, SURPRISE LIBRARY, SVD, REACT, FLASK, CSS

- Engineered a movie recommendation system using the Surprise library, boosting user retention by 50% with personalized recommendations from a curated database of over 1 million films (1970-2023)

Dog Breed Identifier *Jan. 2023 - May 2023*

TECH STACK: PYTHON, TENSORFLOW, DEEP LEARNING, MOBILENETV2 FRAMEWORK, FLASK, REACT, CSS, API

- Developed an accurate identification tool achieving 85% accuracy in under 5 seconds—showcasing a system built for efficient, high-accuracy results, essential in healthcare environments where quick, reliable data is needed.

Certifications & Publication

2024 Exceptional Academic Excellence | Indiana State University.
2024 Exceptional Academic Excellence | University of North Alabama
2023 Research Paper on Balancing phosphorus fertilization using machine learning | 10.1016/j.fcr.2023.109169
2023 Research Paper on Dog Breed Identification | (IRJET), Volume 10, Issue 05, May 2023.
2023 Data Analytics and Visualization Virtual Experience | Accenture, Forage Co.
2023 Complete Machine Learning & Data Science Bootcamp 2023 | Zero to Mastery, Udemy
2022 Ethical Hacking Certification| NPTEL