# Arshdeep S. Ghotra

Terre Haute, IN | ¶ (+1) 256-415-9407 | ▼ aghotra@sycamores.indstate.edu | ☆ ArshSingh | ☑ idk-arsh | ὧ arshsingh

# Work 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.

### **Education**

#### Indiana State University, Terre Haute, IN

BACHELOR OF SCIENCE IN COMPUTER SCIENCE, GPA: 4.0/4.0

Anticipated May 2025

# **Projects**

Course Finder (7)

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

June 2024 - July 2024

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.

Emofiy (1) 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.

#### 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, Postman, Render, Sublime Text, Visual Studio Code

# **Certifications & Publications**

- 2024 Exceptional Academic Excellence | Indiana State University.
- 2023 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