Mohid Tanveer

mohid.tanveer011@gmail.com | (731) 803-9164 | [in/mohidtanveer](https://linkedin.com/in/mohidtanveer) | [portfolio website](https://mohid-tanveer.github.io)

EDUCATION

Rhodes College   **August 2021 - May 2025**
B.S. Computer Science, Overall GPA: 3.91/4.00   *Memphis, TN*

- **Relevant courses**: Machine Learning, Artificial Intelligence, Mathematical Statistics, Statistical Analysis, Multivariable Calculus, Advanced Algorithms, Theory of Computation, Systems Programming and Computer Organization
- **Honors**: Honor Roll and Dean's List

EXPERIENCE

St. Jude Children's Research Hospital   **May 2024 - Present**
High-Performance Research Computing - Student Artificial Intelligence Engineer   *Memphis, TN*

- Researched and implemented an internal Retrieval-Augmented Generation (RAG) pipeline to convert unstructured data into meaningful insight and ensure secure handling of HPC systems info and other sensitive data within the organization; Integrated knowledge graphs to improve accuracy and precision of the model within research contexts.

High-Performance Research Computing - Intern

- Created a Flask job server microservice automating the conversion of tagged image files to a SyGlass project file for researchers; integrated the microservice with an internal imaging file-sharing service, improving workflow and productivity by removing this task from the researchers' plates.
- Established automated network testing, data visualization, and data analysis targeting research storage from various points of St. Jude's campus; providing for consistent testing of network resources and identifying potential points of concern within the network path, employing statistical methods and data analysis.
- Installed Splunk logging services on workstations in the Visual Lab to query logs to answer questions regarding machine utilization and display relevant metrics; providing a means to valuable business intelligence toward resource allocation.

Rhodes College Department of Computer Science   **August 2023 - Present**
Peer Tutor   *Memphis, TN*

- Tutored and guided ~100 introductory and intermediate Computer Science students in twice-weekly sessions
- Designed individual lessons and aid to ensure the students' success by assessing their strengths and weaknesses regarding knowledge of the relevant curriculum

First Choice Medical Care   **May 2021 - August 2021**
Information Technology Intern   *Dyersburg, TN*

- Deployed a new computer database to store 3,000+ patients' medical records at the clinic
- Automated tedious office tasks for employees, improving overall productivity by reducing time for these tasks by ~90%
- Prepared comprehensive documentation and conducted training sessions for 15 employees, enabling them to utilize the new database and automation tools effectively

PROJECTS

Tubify   **August 2023 - Present**
Web Application   *[Repository Link]*

- Employed Python-based FastAPI backend, React.js frontend, and PostgreSQL to create a web application enabling users to share and explore music preferences, fostering connections based on musical compatibility
- Developed a personalized recommender system that analyzes user library, friend activity, and track popularity. Designed to evolve users' music tastes, the system introduces similar and boundary-pushing tracks using collaborative and content-based filtering while adapting in real-time through feedback-driven re-ranking to balance relevance and discovery. The system leverages clustering based on musical taste to target diverse musical interests, providing accurate recommendations.
- Extracted audio features (e.g., acousticness, danceability, energy, valence) using librosa and GPU-accelerated signal processing to enrich recommendations with musical characteristics.
- Built a scalable pipeline to batch-process and persist audio features and user-specific data in a Postgres-backed system.

mohid-tanveer.github.io   **May 2023**
Portfolio Website   *[Repository Link]*

- Created an efficient, multi-page layout with a consistent user experience via React.js, detailing my projects and interests

SKILLS

Technical: Advanced in Python. Proficient in C, Java, and SQL. Experienced in C++, HTML/CSS, JavaScript, Node.js, and R.
Languages: Fluent in English, Urdu, and Punjabi; Conversational Proficiency in Spanish, Hindi
Honors: Eagle Scout