Warith Rahman

XXX-XXXX | warithr21@gmail.com | linkedin.com/in/warith-rahman | github.com/warithr621

EDUCATION

University of Texas at Austin

Austin, TX

Bachelor of Science in Computer Science and Mathematics | GPA: 3.9

May 2027

Relevant Coursework: Computer Architecture (Honors), Data Structures (Honors), Probability I, Linear Algebra Leadership Experience: Texas Science Bowl (President), UT Programming Contests (Problemsetter)

EXPERIENCE

Undergraduate Researcher

Jan 2025 - May 2025

University of Texas at Austin

Austin, TX

- Led data analysis for a study on divergent evolution in *Eurycea* salamanders under Dr. Joseph Dubie, designed an R pipeline to process and visualize 4M+ genetic data points
- Performed differential expression analysis that identified 20 protein-coding candidate genes, presented results with a 5-member team at the final research showcase

Software Developer

Sep 2024 – Dec 2024

Longhorn Developers

Austin, TX

- Developed features for "UT Registration Plus" (60,000+ downloads) through weekly sprint meetings and collaborative QA, improving extension functionality to ease university registration process
- Refactored schedule table and resources in TypeScript to improve layout clarity, managing progress with a Jira-style Kanban using GitHub Issues and Projects

PROJECTS

K-Pop Release Predictor | Python (pandas, scikit-learn), Next.js, Tailwind CSS

- Developed a full-stack machine learning web application to predict K-pop group release patterns within an 8-week accuracy interval
- Engineered automated data collection pipeline using MusicBrainz API to scrape and process release information from 90+ 21st century K-pop artists, implementing duplicate detection and CSV export functionality
- Constructed an interactive Next.js frontend with an interactive timeline, employing API endpoints via Python FastAPI for outputting predictions within 2 seconds

TSB Question App | Express.js, MongoDB, Tailwind CSS, Render

- Engineered and launched a full-stack app maintaining secure storage of 900+ tournament questions in MongoDB
- Streamlined workflow by unifying question uploads and automated LaTeX packet generation, using a CSV upload parser to enable cross-team collaboration and reduce compilation time by 100x

UIL Hub | Python Flask, Node.js, HTML, CSS

- Built a Flask web app to scrape UIL results from SpeechWire, reducing query time by 10x from original CLI script
- Integrated real-time sorting and multithreading for CSV export filtered across contests, regions, and classifications

Game Theory | TypeScript, ReactJS, DigitalOcean

• Designed and deployed an interactive online card game with TypeScript and ReactJS, enabling real-time multiplayer gameplay and scalable hosting via DigitalOcean droplets

ACHIEVEMENTS

Top 300 at DoD Cyber Sentinel CTF 2025Jun 20253rd Place Energy AI Hackathon 2025Jan 2025Top 20 Pre-College US teams at PicoCTF 2024Mar 20244x American Invitational Mathematics Exam (AIME) QualifierMar 2024

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (PostgreSQL), JavaScript, TypeScript, HTML/CSS, R, LATEX

Frameworks and Tools: Flask, Tailwind CSS, ReactJS, Node.js, Express.js, MongoDB, REST API, Git, Visual

Studio, IntelliJ, Docker, Linux, Microsoft Excel, Tableau Libraries: Pandas, NumPy, Matplotlib, scikit-learn