Zayn Ullah

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EDUCATION

Georgia Institute of Technology — Exp. Graduation: May 2027
Bachelor of Science in Computer Science, Concentration in AI — *Atlanta, GA*
- **Academic Honors:** Dean's List 2x, Zelle Miller Scholarship Recipient

EXPERIENCE

Co-Founder & Software Developer — Jan. 2025 – Present
SylCampus — *Alpharetta, GA*
- Launched a Software as a Service (SaaS) platform that transformed 2,000+ messy syllabi into organized dashboards, adopted by 600+ paying users at 100+ universities, reducing organizational time for users by 90%.
- Engineered a scalable backend (Python/Django, SQLite) and responsive frontend (TypeScript, HTML/CSS, JavaScript), delivering 99.9% uptime and supporting 5,000+ scheduled assignments and exams.
- Deployed Meta Pixel and Conversions API with AWS Lambda and CloudWatch to capture 10,000+ real-time events per week, producing insights that improved ad conversion rates by 18%.
- Scaled product adoption while winning the University of Georgia's Idea Accelerator Competition and completing Georgia Tech CREATE-X's Startup Launch Program, resulting in market validation and institutional recognition.

AI Research Assistant — Jan. 2025 – May 2025
Georgia Tech Research Institute — *Atlanta, GA*
- Built a pipeline for conditionally generating crystal structures with LLMs, producing 100+ valid structures with targeted band gaps (1.1–1.9 eV), accelerating discovery of semiconducting materials by $3\times$.
- Fine-tuned LLaMA-2 with LoRA, cutting training costs by 40% and enabling scalable experimentation on 50,000+ CIF-formatted crystal samples for faster materials discovery.
- Reduced property prediction error by 22% through MAE-based evaluation, improving accuracy of band gap and formation energy estimates critical for electronic and energy applications.
- Boosted dual-alignment accuracy by 35% with oversampling and dual-property generation, enhancing reliability of multi-property predictions for real-world materials design.

PROJECTS

AI-Powered Checkout Optimization System | *Python, OpenCV, NumPy*
- Developed a face and item recognition algorithm that reduced cafeteria checkout time by 30% during trials.

Resume Analyzer | *Python, HTML/CSS, Mistral*
- Built an AI-driven resume analyzer using Mistral-7B-Instruct, scoring resumes on 5+ sections and generating 3–5 targeted recommendations per upload, helping users improve their resume scores by an average of 30%.
- Integrated drag-and-drop uploads (PDF/DOCX/TXT) and API fallback handling, allowing for the system to process 200+ resumes with no downtime.

Smart Habit Tracker | *Python, Flask, SQLite, HTML/CSS, Alpine.js*
- Designed and developed web app that enabled users to build and maintain habits through streak tracking, automated reminders, and interactive data visualizations, leading to improvements in long-term habit adherence.
- Implemented secure user authentication and a robust SQLite-based backend for habit creation, management, and daily progress logging, ensuring persistent data storage and a reliable user experience across multiple sessions.

Spotify Data Analysis | *Java, Spotify API*
- Created a mobile application in Android Studio that integrated with the Spotify API to analyze user listening data, automatically generating a comprehensive summary of top songs, artists, genres, and listening trends over time, providing users with personalized insights into their music habits.

SKILLS & INTERESTS

Languages: Python, JavaScript, TypeScript, Java, C/C++, Assembly, SQL, HTML/CSS
Frameworks: Django, Flask, React, Alpine.js, Node.js, JUnit
Developer Tools: Git, Docker, AWS, Conda, PyCharm, IntelliJ, VS Code, Android Studio
Libraries/ML: NumPy, Matplotlib, OpenCV, scikit-learn, PyTorch, Hugging Face Transformers, Mistral, LLaMA
Interests: Atlanta Sports Teams (unfortunately), Swimming, Entrepreneurship, Muslim Student Association