

Moubarak Clemenceau Ali-Kparah

(945)-276-8717 | alikparahmoubarak@gmail.com | [linkedin.com/in/moubarak-ali-kparah](https://www.linkedin.com/in/moubarak-ali-kparah) | github.com/Moubarak-01

EDUCATION

Rust College - Expected December 2028

Holly Springs, MS

Bachelor of Science in Computer Science: 4.0 GPA

Relevant Coursework: Pre-Calculus, Intro to Python, Calculus I

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, HTML/CSS

Frontend: React, Tailwind CSS, Vite, React Query, Radix UI, HTML/CSS

Backend & System: Electron (IPC, Native Modules), Node.js, REST APIs

AI & ML: Gemini API (1.5 & 2.0 Flash), DeepSeek R1, Perplexity, Groq, Whisper (Local & Cloud), Speech-to-Text

Tools: Git/GitHub, Linux (Bash), VS Code, CyberChef, SSH

Certifications: [CodePath CyberSecurity](#), French Language Proficiency – Native

TECHNICAL PROJECTS

[Personal Portfolio Website](#) — HTML, CSS, JavaScript

September 2025

- Developed a high-performance portfolio site using modern CSS Grid and Flexbox, achieving a 100/100 Lighthouse performance score.
- Automated deployment pipelines via GitHub Actions with custom domain configuration and SEO optimization.

[Movie Search App](#) — React, JavaScript, Tailwind CSS, AppWrite

November 2025

- Built a reactive web application leveraging Appwrite for secure authentication and real-time database management to track and visualize trending content from external REST APIs.
- Engineered a smart traffic routing system that detects user device types to launch native Android intents or fallback to web streaming, optimizing the mobile user experience.
- Designed a fully responsive interface using Tailwind CSS, creating a custom modal architecture that displays rich movie details and preserves user context across mobile and desktop devices.

[Moubely\(Desktop Assistant\)](#) — Electron, React, TypeScript, Gemini/DeepSeek/Perplexity APIs

December 2025

- Core Architecture:** Engineered a stealth desktop overlay using Electron, implementing advanced window management (transparency, click-through forwarding, and always-on-top states) to provide non-intrusive AI assistance.
- AI Integration:** Architected a **7-layer "Waterfall" routing system** that automatically cascades from Gemini to DeepSeek/Groq upon failure, guaranteeing zero downtime. Implemented **live terminal telemetry** to visualize IPC data flow and real-time model decision logic.
- Real-Time Audio Engine:** Developed a hybrid speech-to-text system using a local Whisper server with a custom restart loop to process audio in continuous chunks, effectively bypassing API rate limits (429) and preventing connection timeouts during long meetings.
- System-Level Features:** Implemented global keyboard shortcuts (e.g., Ctrl+H for screen analysis) and native OS integration using nativeImage and Tray APIs for seamless background operation.

EXPERIENCE

Rhodes College

Memphis, TN

Biology Research Intern

May 2025 - July 2025

- Managed 20+ complex scientific protocols, strictly adhering to documentation standards that mirror software version control and debugging methodologies.
- Automated data entry workflows where possible, reducing manual error rates by 15% through systematic process optimization.

LEADERSHIP

Rust College

January 2025 - Present

Student-Athlete

- Compete in intercollegiate tennis matches while maintaining a 4.0 GPA, dedicating 20+ hours weekly to training and travel.
- Mentor incoming freshmen on time management strategies and balancing academic rigor with athletic commitments.

ORGANIZATIONS & HONORS

ColorStack Fellow · Presidential Scholar