Kennedy Gregg

Washington, DC | 678-593-8731 | kennedygregg1211@gmail.com | Linkedin | Github

EDUCATION

Howard University Washington, DC
Bachelor of Science in Computer Science Expected**:** May 2027

- **Honors**: Dean's List (Fall 2024, Spring 2025)
- Google Tech Exchange Scholar
    - Selected for Google's semester-long Tech Exchange program focused on advanced computer science, software engineering, and applied AI learning with industry mentorship.

EXPERIENCE

The Home Depot Externship Summer 2025
AI Workforce Management Extern Acworth, GA

- Developed a final project proposal for an AI-powered scheduling tool that optimized workforce allocation by leveraging weather patterns, seasonal demand, and business trends.
- Collaborated with peers to design AI-driven solutions addressing workforce management challenges at scale.
- Presented solution recommendations demonstrating how predictive analytics and machine learning could improve operational efficiency.

Undergraduate Research - NAVY & AAVE September 2025 - Current
Howard University Washington, D.C

- Designing LLM-based systems that, given an approaching vessel image and Navy documentation, generate tactical decision recommendations for naval officers.
- Conducting automated transcription research on African American Vernacular English (AAVE), focusing on regional variation and error patterns in speech recognition models to improve accuracy and fairness across dialects.

PROJECTS

Machine Learning Project | *Python, C++, C#, ML-Agents*

- Developed a learning AI using Python, C++, C#, and ML-Agents to complete tasks like obstacle avoidance and 2v2 soccer matches against AI opponents.
- Logged brain states every 5000ms to measure learning progress and compare performance over 1 week vs. 1 month of training.

Vocalytics (Morgan Hacks Hackathon - 2nd Place Overall & Education Track Winners) | *Python, Flask, SQLite, OpenCV, Media Pipe, Speech Recognition, Gemini AI, Eleven Labs API, HTML/CSS, JavaScript*

- Developed a Raspberry Pi-powered tool using Python, OpenCV, and Media Pipe to track speech patterns and posture in real-time, providing feedback for communication skill improvement.
- Engineered the backend using Flask and SQLite, set up the Raspberry Pi environment, and integrated AI for analysis and feedback.
- Aimed to support users like stroke survivors, public speakers, or physical therapy patients by offering a low-cost, portable system for monitoring progress outside clinical settings.
- Placed 2nd overall out of 35+ teams.

Eido (BE Smart Hackathon) | *FastAPI, Next.js, Supabase, OpenAI, Three.js, PostgreSQL, Supermemory, TypeSense* | *DEMO*

- Built and deployed a full-stack AI learning platform (FastAPI + Supabase backend on Railway, Next.js frontend on Vercel) with JWT authentication, pgvector embeddings, and OpenAI integration for personalized study tools and user matching.
- Architected a scalable PostgreSQL schema (8+ tables) with typed Pydantic models, repository/service layers, and vector similarity search using 1536-dim OpenAI embeddings and IVFFlat indexing for real-time user recommendations.
- Created an interactive 3D knowledge graph using Three.js + 3d-force-graph featuring smooth camera controls, dynamic filtering, and optimized rendering for visualizing learning connections.

TECHNICAL SKILLS

- **Languages:** Python, C++, C#, JavaScript, SQL, HTML, CSS
- **Tools & Frameworks:** Flask, Django, OpenCV, Media Pipe, SQLite, Gemini AI, Eleven Labs API, Speech Recognition, Raspberry Pi, Git, Machine Learning, Object-Oriented Programming