

Obinna (ND) Nwaneri

(612) 800-2962 | nd@u.northwestern.edu | [linkedin.com/in/ndnwaneri/](https://www.linkedin.com/in/ndnwaneri/) | github.com/onwaneri

EDUCATION

Northwestern University | Evanston, Illinois
Bachelor of Science in **Computer Engineering and Neuroscience**
Certificate in **Human-Computer-Interaction**
Honors and Awards: Dean's List

Anticipated June 2028

Relevant Courses: Advanced Digital Design, Computer System Software (ARM Assembly), Programming in C++, Data Structures and Algorithms, Signals and Systems, Bioelectronics, Computational Brain Function

PROJECTS

MagClean | Purdue StarkHacks: Natural Language Whiteboard Eraser Robot April 2026

- Built C++ firmware on an ESP32 converting vision-identified targets into motor degrees and drive coordinates for a mobile robot
- Developed a perception pipeline on the Gemini 2.5 Flash VLM, mapping natural language spatial queries to bounding box coordinates
- Achieved a 95% success rate in object identification and targeting, enabling interaction between human speech and hardware response
- Wired, flashed, and bench-debugged the hardware on a four-person team, isolating build faults with a multimeter and oscilloscope

Competitive Pokémon AI Teambuilder June 2026

- Designed and built a competitive strategy tool driven by live tournament data, real-time usage analysis, and an in-app AI assistant
- Delegated all correctness-critical logic to deterministic function-call tools after finding generated math unreliable at scale
- Reached the top 1% of the game's global rankings using the tool, validating the product against the outcome it was built to drive

Switch | Stanford TreeHacks: Educational Literacy Tool February 2026

- Built a Next.js and Python platform to automate word analysis and automate Structured Word Inquiry for students with dyslexia
- Engineered a pipeline on the Claude and OpenAI APIs for real-time etymology decomposition and cached text-to-speech breakdown

Telepathy | EEG Speech Decoder February 2026

- Architected an EEG speech BCI pipeline on Whisper and PsychoPy capturing stimulus-locked word timestamps; hardware pending
- Designed a phonologically optimized 15-word command library with linguistic metadata, producing sets for (future) EEGNet training

WORK EXPERIENCE

Comed | Joliet, Illinois June 2026 — August 2026

Operations Intern

- Built a multi-step Copilot Studio agent turning dense grid design documents into exact edits to the utility's digital grid model (SCADA)
- Cut change requests from 1 to 3 hours to 20 to 30 minutes, correctly identifying ~80% of required changes over 25 test cases
- Replaced a paper and Microsoft Access field verification workflow with a Power Apps and Dataverse app across 100+ summer projects
- Eliminated an estimated 200 annual hours of printing, scanning, and retyping, and documented the handoff for the next planning cycle

Rogers Research Group | Evanston, Illinois September 2025 — Present

Student Researcher

- Execute experimental protocols for PhD-led projects in a flexible bioelectronics lab, running procedure steps and collecting data
- Support a wearable acoustic cough sensor for respiratory infection classification, including accelerometer instrumentation work

Northwestern Engineering Shop | Evanston, Illinois April 2025 — Present

Shop Trainer

- Train incoming engineering students to safely operate machine shop equipment, including the drill press, mill, lathe, and CNC router
- Hold responsibility for floor safety practice, teaching correct tool operation and correcting unsafe technique before it escalates

TurtleShell Tableware - Accessible Dishware Startup | Evanston, Illinois January 2025 — August 2025

Co-Founder

- Secured \$10,000 in funding through the Jumpstart Program at The Garage, Northwestern University's startup incubator
- Drove the end-to-end product life cycle for an assistive microwave tray, advancing from initial CAD prototypes in Fusion360 to confirming product-market fit by collecting design feedback from over 200 users in the disability community

LEADERSHIP & PROFESSIONAL DEVELOPMENT

National Society of Black Engineers (NSBE) | Evanston, Illinois December 2024 — March 2026

Finance Chair

- Managed a \$20k+ chapter budget and raised \$12,500+ in corporate sponsorship from Accenture, Nokia, and Ingredion, directing the funds toward sending 50 members to the Regional Conference in Covington and 30 members to the National Convention in Baltimore

Jane Street | New York, New York January 2026

IN FOCUS Program Participant, Product and Strategy Track

- Selected from a competitive, national pool for a program on solving cross-departmental challenges at a leading quantitative firm
- Chosen for the Strategy & Product track to learn how the firm optimizes financing, navigates regulatory issues, and manages growth

Selective Programs October 2025 — Present

Management Leadership for Tomorrow Career Prep Fellow, SEO Career EDGE Participant

ADDITIONAL

Languages (programming): C++, C, ARM Assembly, Python, Racket, SQL

Hardware & Lab: ESP32, Arduino, Soldering, Breadboarding, Oscilloscope & Multimeter Debugging, Fusion360, CNC, Mill, Lathe

Tools & Platforms: Git, REST APIs, FastAPI, Vercel, Firebase

Languages (speaking): Conversational Japanese, Igbo

Interests: Music Production, Saxophone, Film, Video editing, Comedy, PC Building

Campus Organizations: Delta Sigma Pi, Sigma Nu, Overtime Improv, Garage Startup Incubator, Admissions Office Tour Guide