

Maxwell Brohm

Software & Machine-Learning Engineer

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SUMMARY

High school software engineer who builds from first principles, from language models written from scratch in PyTorch to live, production AI products. Congressional App Challenge winner, studying computer science through early college and heading toward a career in software and machine-learning engineering.

EDUCATION

County College of Morris · Early College / Dual Enrollment

3.9 GPA

Associate of Science in Computer Science (in progress) and Data Analytics Certificate

Morris County School of Technology (MCST)

Class of 2027

Academy 12th Grade Option (2026-2027), attending County College of Morris full time

AP Computer Science A: 4 · AP Computer Science Principles: 4

EXPERIENCE

IT Lead & AI Innovation, UA Design

Current

- Sole IT administrator for an interior design firm: infrastructure, security, and AI innovation.
- Built a client consultation-booking system on Node.js and Express, integrated with the Google Calendar API.
- Built and deployed an AI automation intake form (maxwellbrohm.github.io/AI-Automation-Form).

AI Automation Intern, ISE Media

- Built AI-driven automation workflows.

SELECTED PROJECTS

ChronoIQ · chronoiq.dev

App Challenge Winner

AI study scheduler that reads Google Calendar and Classroom and uses Gemini to auto-build study blocks. Co-built with Zander Leon; being scaled for school adoption. Next.js, React, Gemini API, Google APIs.

MaxGPT · github.com/MaxwellBrohm/MaxGPT

GPT-style language models built from scratch (23M to 235M parameters): custom BPE tokenizer, transformer, and training loop with cosine learning-rate decay; conversational fine-tuning planned. Python, PyTorch.

Neuromaker (BCI)

EEG anomaly-detection app built with my school's biotech academy; flags unusually high or low brain activity. Flutter, Dart.

AWARDS & HONORS

- Congressional App Challenge Winner, NJ-07 (ChronoIQ)
- JerseyCTF: Top 5 · Garden State CTF: Top 20 · picoCTF: Top 200

LEADERSHIP & ACTIVITIES

- Track and Field, Team Captain (winter) · Cross Country · Soccer (fall)
- FRC Robotics, Team 8588, Programming Sub-team Lead (2025-2026)
- Church youth ministry, volunteer and vocalist

TECHNICAL SKILLS

Languages: Java, Python, R, JavaScript, C#, Dart

Frameworks & runtime: Node.js, Express, Next.js, React, Flutter

AI / ML: training language models from scratch, fine-tuning, AI workflow automation, data science and analytics

Tools: Git and GitHub, Google APIs, PyTorch, ggplot2

IT & systems: network and infrastructure administration, security, hardware troubleshooting