

Matthew Gresock

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EDUCATION

Cornell University, College of Engineering

Bachelor of Science in Operations Research & Information Engineering, Computer Science

Ithaca, NY

Anticipated May 2028

Relevant Coursework: Data Structures and Algorithms, Calculus II, Multivariable Calculus, Object-Oriented Programming, Probability & Statistics, Linear Algebra

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, TypeScript, SQL

Frameworks & Libraries: React, Next.js, Tailwind CSS, Node.js

Cloud & Databases: AWS (S3, CloudFront, Cognito, MediaConvert, EventBridge, RDS), PostgreSQL, Supabase

Developer Tools: Git, Docker, Linux, Vercel

AI Tools: Claude Code, Claude Console, Codex, Anthropic API, OpenAI API, GitHub Copilot

PROJECTS

ForageAI – Cloud-Hosted AI-Nutrition Platform

Full Stack Developer

May 2026

- Built a multi-user AI nutrition platform with Next.js, TypeScript, Supabase, PostgreSQL, and Anthropic APIs for meal analysis
- Designed PostgreSQL schemas and REST API workflows for meal logging, nutrition analysis, user activity, and progress tracking
- Developed responsive React dashboards and data visualizations; containerized the application with Capcator for reproducible deployment

MyTube – AWS Video Streaming Platform

Full Stack Developer

July 2026

- Built a full-stack video-sharing platform using Next.js and TypeScript with uploads, playback, search, channels, comments, and reactions
- Engineered an event-driven AWS video pipeline using S3, MediaConvert, CloudFront, Cognito, EventBridge, and PostgreSQL on RDS
- Implemented S3 uploads, Cognito JWT auth, automated transcoding, CloudFront delivery, and PostgreSQL search

WORK EXPERIENCE

Cornell University – BeyngLab/StudioLab

Undergraduate Research Assistant

Remote

June 2026 – Present

- Own backend development for a 40,000+ page digital archive, building AI-assisted search and content-retrieval functionality
- Collaborated with a frontend developer and project lead to define interfaces, integrate features, and coordinate delivery
- Applied LLM-assisted workflows to restructure legacy HTML content, improving accessibility and long term maintainability

Math Lab Online

Co-Founder

Rochester, NY

February 2023 – August 2025

- Co-founded a 501(c)(3) nonprofit organization providing free mathematics tutoring to high school students
- Developed partnerships with local National Honor Societies to implement a volunteer tutoring program
- Created outreach materials and recruitment processes to expand student and volunteer participation

Wegmans

Cashier & Self Checkout Overseer

Penfield, NY

November 2023 – Present

- Troubleshoot checkout-system issues and assisted customers with digital payment and self-service interfaces
- Oversaw 12+ self-checkout stations, ensuring accurate transaction monitoring, error resolution, and security compliance
- Resolved transaction, payment, and equipment issues during high-volume shifts while maintaining efficient customer flow

LEADERSHIP & ACTIVITIES

Sigma Nu Fraternity, Gamma Theta Chapter

Treasurer

Ithaca, NY

January 2026 – Present

- Oversee chapter finances, cash flow, reimbursements, and vendor payments across a \$200,000+ semester budget
- Built and monitored operating budgets for social, recruitment, housing, and member programming expenses
- Negotiated with vendors and coordinated event logistics, balancing cost, quality, scheduling, and chapter needs

Kappa Theta Pi Cornell Chapter

President of Beta New Member Class

Ithaca, NY

September 2025 – Present

- Evaluated client-facing interfaces and proposed UI improvements to strengthen usability, navigation, and visual hierarchy
- Developed design recommendations with project teams for technology consulting engagements
- Applied software-development, product-design, and consulting principles through technical workshops and client engagements

Speech & Debate

Captain, Student Coach, Judge, Treasurer

Rochester, NY

November 2021 – Present

- Delivered persuasive speeches at regional, state, and national tournaments, adapting arguments for judges and diverse audiences
- Coached students in speechwriting, delivery, audience engagement, and extemporaneous speaking through weekly practices
- Qualified for NCFL Nationals three times and NYSFL Championships four times; placed 6th in Original Oratory in 2025

Scouts BSA

Eagle Scout, Senior Patrol Leader, Junior Assistant Scoutmaster, Assistant Senior Patrol Leader

Webster, NY

March 2018 – March 2025

- Led weekly meetings, monthly outings, and youth leadership teams as Senior Patrol Leader and Junior Assistant Scoutmaster
- Directed logistics and daily operations for a 50-member contingent at the 2023 National Jamboree in West Virginia
- Mentored younger scouts in leadership, advancement, and team-building while earning Eagle Scout rank through community service