

Morgan E. Koch

Erie, PA || (717) 601-4034 || ekoch.morgan@gmail.com || www.linkedin.com/in/moekoch || <https://github.com/moekoch>

EDUCATION

The Pennsylvania State University

School of Engineering & Black School of Business at Penn State Behrend

Bachelor of Science in Computer Science

Minor in Management Information Systems (MIS)

Erie, PA

Graduation: May 2027

GPA: 3.37

Honors: AAUW Carlisle Higher Education Scholarship, Shelly and Shirley Czulewicz Trustee Scholarship

Certification: NVIDIA Fundamentals of Deep Learning (2024) — instructor-led, assessment required 92%+ validation accuracy

Relevant Coursework: Data Structures & Algorithms, Object-Oriented Programming, Operating Systems, Software Engineering

RELEVANT EXPERIENCE

App Development Manager / Software Engineer (Excelerate Internship)

Erie, PA

Virtual/Augmented Reality (VAR) Lab at Penn State Behrend

March 2025 – Present

- Engineered and deployed Landing Place, an AI-enabled React Native/Expo mobile application (iOS) for clinical research and outcome tracking.
- Revived a non-functional legacy codebase and led a five-person team to deliver a production-ready application within one academic year.
- Owned the end-to-end release lifecycle, including build automation, versioning, provisioning, and TestFlight distribution for internal testing and active clinical trials deployed to ~80 participants.
- Established technical direction for an inherited codebase in a high-ambiguity environment and collaborated with researchers to define requirements and resolve system issues.

IT Product Management Intern

Enola, PA

Members 1st Federal Credit Union

May 2026 – July 2026

- Defined product and technical requirements for AI-powered chat and smart summary features within a digital banking application to enable secure, AI-driven member interactions while ensuring compatibility with legacy backend systems and regulatory requirements.
- Analyzed Azure, LlamaIndex, and LangChain architectures to support engineering decisions for RAG and agent-based AI workflows, documenting trade-offs between retrieval-heavy and agentic approaches.
- Conducted competitive analysis of AI fintech solutions, documenting recommendations for scalability, compliance, auditability, and responsible AI practices.

IT Project Management Intern

Harrisburg, PA

TE Connectivity

May 2025 – August 2025

- Supported cross-functional stakeholder alignment, project documentation (CONOPS, BRDs, RASCI), and global multi-region coordination across IT initiatives.

PROJECTS

Penn State Behrend eSports Website

Erie, PA

Penn State Information Technology Services

May 2026 – Present

Building a custom WordPress (HTML/CSS/JavaScript) site for Behrend eSports with reusable layouts and documentation enabling non-technical board members to maintain content post-deployment.

RedScare | 1st Place Winning Hackathon Project

Erie, PA

Penn State Behrend School of Engineering

April 11, 2026

Built a women's health web app (cycle/symptom tracking, data visualizations, AI-powered insights) in 12 hours using JavaScript, EJS, HTML5, CSS, Supabase, and an Anthropic API — earned 1st Place in Open Innovation category.

TECHNICAL SKILLS

Languages: Java, JavaScript, C/C++, Python, SQL

Mobile Development: React Native, Expo

Cloud & AI: Azure, RAG Systems, LLM integrations

Tools & Platforms: Git, GitHub, Docker, Figma, Firebase, Supabase

Hardware & IT Support: ServiceNow, Device Imaging/Repair, Meta Quest (VR/AR)

Design & Creative: Adobe Creative Suite, Blender (3D animation, basic rigging)

LEADERSHIP & ACTIVITIES

Vice President | Association for Computing Machinery (ACM) — Lead technical workshops, hackathon preparation, and industry speaker events for the campus computing community.

Media Board Member & Competitive Team Member | Behrend eSports (ECAC) — Lead web/branding initiatives and represent Behrend in collegiate competitions.