COLE MCGREGOR

SOFTWARE ENGINEER

CONTACT

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github.com/ColeMcGregor

EDUCATION

2022-2025
SIENA COLLEGE

- B.S. in Computer Science: Software Development
- GPA: 3.60 ∴ Cum Laude

2020-2022
HUDSON VALLEY COMMUNITY COLLEGE

- A.S. in Computer Science
- GPA: 3.70

SOFT SKILLS

- Technical Leadership
- Team Coordination
- Communication
- Technical Compromise
- Charismatic Team Participation
- Critical Thinking
- Problem Solving
- Task Comprehension
- Project Planning
- Backlog Management
- Documentation & Clarity in Task Design
- Agile Scrum Workflow (Product Ownership)

PROFILE

Experienced in system and game design, backend architecture, AI integration, and mobile development. Led Agile teams as a Product Owner and contributed hands-on to projects using React Native, FastAPI, Docker, and OpenAI APIs. I am passionate about building efficient, user-focused systems that improve over outdated and less accessible designs. I especially enjoy optimizing algorithmic systems and solving logic-heavy challenges.

TECHNICAL SKILLS

- Programming: Java, C++, JavaScript, Python, C, C#
- Games: Unreal, Unity, Game Physics, Blueprint
- LLM Prompt Generation
- Design Patterns
- Software Architecture
- Project Design & Development
- REST API Development
- In-depth documentation
- AI Tools: ChatGPT (3–4o), Perplexity, Ollama, Cursor, APIs
- SQL & NoSQL
- Authentication & RBAC
- React Native & Expo
- Firebase Integration
- Docker & Docker Compose
- GitHub, Github Projects
- Product Mockup

EXPERIENCE

Siena College Software Engineering 2024-2025
Software Engineer and Agile Product Owner

- Managed the product backlog for a distributed, AI-based healthcare scheduling system
- Led Agile coordination with developers and the Scrum Master
- Integrated external APIs including Twilio, OpenAI, and a Medent EHR emulator
- Designed and developed core architecture and backend services for Logging and IAM using FastAPI and Docker
- Maintained complete system documentation, diagrams, and unit/system tests, ensuring minimal overhead time for team turnover
- Collaborated with clients to refine features and align with evolving needs

Siena College Parallel Processing 2024
Logic and Physics Development Lead

- Built a 3D parallel N-body simulator in C++ to model gravitational systems
- Used OpenMP and multithreading for scalable force calculations
- Ran performance benchmarks on TACC supercomputing resources
- Implemented real-time 3D visualization with data slicing for efficiency
- Applied stable numerical integration for high-gravity accuracy

United States Air Force 2016-2019
Armament Systems Specialist, Squadron Leader

- Supervised and mentored over 400 trainees during technical training, promoting accountability and team performance
- Managed inspections, inventory, and tool checkout systems in a high-security environment
- Provided logistical and facility support, ensuring operational readiness across multiple units