

Zachery Pipes

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EDUCATION

Missouri University of Science and Technology – Rolla, MO

Fall 2027

B.S. in Computer Science

GPA: 3.7 / 4.0

Relevant Coursework: Intro to Networking, Databases and File Structures, Algorithms, Intro to OS, Theory of CS, Data Structures, Intro to C++

TECHNICAL SKILLS

Programming Languages: C++, C#, Python, Java

Libraries & APIs: pandas, requests, eBay

Certifications: Java, Microsoft Word, Microsoft Excel, Microsoft PowerPoint

Awards & Honors: S&T Honors Academy, Kummer Vanguard Scholar, Magna Cum Laude, Gold Scholar, Dean's List

PERSONAL PROJECTS

fastdist | C++, Python, PyBind11, CUDA

December 2025 - Present

- Accelerated computationally intensive functions using CUDA, achieving ~ 2.5x speedups on large datasets compared to CPU implementations.
- Built C++ wrappers to interface with Python, optimizing memory management and performance-critical operations.
- Implemented robust testing and validation pipelines to ensure accuracy and consistency across CPU and GPU computations.

Finance Manager | C#, MVVM

April 2025 - Present

- Engineered a personal finance management application using MVVM architecture
- Designed and implemented dynamic bindings into DataGrids to provide users with responsive, real-time views
- Implemented modular, testable ViewModels leveraging CommunityToolkit.Mvvm to streamline development and maintenance

EvergreenRx | C#, MVVM

August 2025 - Present

- Architected and enforced MVVM structure, separating presentation, business logic, and data layers to improve maintainability and testability.
- Developed data-bound views, commands, and navigation flows to support inventory forecasting features that optimize medication stock levels, reducing tied-up capital and shelf usage.
- Delivered a maintainable MVVM-based UI architecture that enables future predictive inventory features.

PROFESSIONAL EXPERIENCE

Software Team - Research Sublead

August 2024 - Present

Multirotor Design Team

- Simulated drone flight dynamics and mapping workflows on real-world terrain data using Unreal Engine
- Onboarded and mentored 5+ new team members by teaching Python, Git, and GitHub for version control and collaborative development
- Configured and optimized Unreal Engine simulation environments by integrating assets, physics parameters, and control interfaces to support accurate testing scenarios
- Expanding the simulation executable to support multi-drone coordination and swarm behavior testing

Teammate

November 2021 - Present

The UPS Store - Columbia, MO

- Processed and shipped packages to destinations across the United States
- Trained new employees on store procedures and best practices
- Provided excellent customer service through answering questions, resolving issues, and providing solutions tailored to customer needs