JOSHUA FRATIS

📞 484-877-0741   ✉ frajosk@gmail.com   🌐 http://www.joshuafratis.com/

EDUCATION

University of Pittsburgh   Pittsburgh, PA
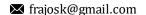Bachelor of Science in Computer Science   Expected December 2024
Bachelor of Arts in Digital Narrative & Interactive Design   GPA: 3.9
Honors College | Dean's List | SCI Computer Science Scholar

SKILLS

C | C++ | C# | Java | Python | JavaScript | Vue | Angular | HTTP | REST | HTML | CSS | Tailwind | Spring | Gradle | SQL
Git | Linux | Software Testing | JUnit | Cypress | Selenium | SDLC | Agile | Documentation | Communication | Teamwork
Unity | Unreal Engine 5 | Networking | ECS | Steam | Game Development | Prototyping | Playtesting | Leadership

EXPERIENCE

Blast Furnace Games   Pittsburgh, PA (Hybrid)
Co-founder, Software Engineer   January 2023 - present

- **Launched *A Gentlemen's Dispute***, a networked multiplayer physics-based brawler party game, on Steam July 2024 after just six months of development.

- **Led the formation of a team of nine dedicated cross-discipline developers**, initiating and directing the development of our shared vision, team coordination, and products with unfailing tenacity. Lead daily standups, weekly design meetings, joint programming sessions, and constant online communication to achieve our success

- Delivered suites of new gameplay systems– including character and camera control, game management, enemy AI, inventory systems, animation, UI, and procedural generation– to construct a highly robust codebase and simulation. Maintained close and continuous coordination with engineering partners while independently delivering solutions.

- Developed networked multiplayer features utilizing rollback netcode and lag compensation, maximizing performance and reducing latency to deliver an exceptional online experience (Unity, C#, ECS).

- **Won "Gold"** for ***Steelpunk*** at **Carnegie Mellon University**'s Game Creation Society's 2023 Games Festival.

Software Engineering Institute, Carnegie Mellon University   Pittsburgh, PA (Hybrid)
Developer Intern   May 2024 - August 2024

- Developed a back-end microservice ecosystem (Java, Spring, Gradle) and supporting relational database systems (SQL) for customer-facing web applications, improving application performance and enabling seamless end-to-end communication.

- Delivered new front-end components and features (JavaScript, Vue) to create an exceptional customer experience.

- Wrote and maintained comprehensive unit tests for both front-end and back-end, ensuring stability of new features and eliminating bugs shipped to production (JUnit, Mockito, Cypress).

- Collaborated within a team of stakeholders, designers, and developers to establish and achieve long-term goals, promoting employee engagement and communication across the company.

TerraSim, Bohemia Interactive Simulations   Pittsburgh, PA (Hybrid)
Application Engineer Intern   May 2023 - August 2023

- Shipped contributions to established services supporting VBS4, a real-time 3D combat simulation game engine.

- Developed and delivered front-end and user interface features (TypeScript, Angular) for Mantle ETM, a simulated terrain creation pipeline and management platform governed by a service oriented architecture.

- Utilized Agile development practices and version control systems across multiple repositories such as maintaining and rebasing feature branches, resolving merge conflicts, and performing code reviews (Git, JIRA, GitLab).

BehaVR, Inc.   Nashville, TN (Remote)
QA Software Engineer   May 2022 - August 2022

- Conducted quality assurance critical to the production of ***First Resort***, a **2023 Games for Change's Best Health Game** nominee, and to the success of an early start-up, succeeding as a core part of a small team in a fast-paced environment.

- Wrote test cases and performed thorough testing of VR games promoting mental and behavioral health (Oculus).

- Developed automated tests for progressive web applications (Cypress) to ensure total functionality and enforce accessibility according to WCAG standards.