BRADY MANSKE

Software Engineer | Object-Oriented Programming | Full-Stack Development

(360) 510-7408 | bmanske505@gmail.com | linkedin.com/in/brady-manske | state0fflux.github.io

EDUCATION

University of Washington | Seattle, WA   **SEPTEMBER 2023 - JUNE 2026**

Bachelor of Science, Computer Science, Minor in Digital Arts | GPA: 3.92, 2x Annual Dean's List

Relevant Coursework: Systems Programming, Computer Graphics, Machine Learning, Data Structures & Algorithms

TECHNICAL QUALIFICATIONS

Languages: C#, C++, Python, Java, TypeScript, HTML, CSS   **Frameworks & Tools**: Tailwind, React, Vite, Node.js, Pandas, Git

Focus Areas: Gameplay Programming, Web Development   **Environments & IDEs**: Unity, VS Code, Linux

PROJECT EXPERIENCE

File System Search Engine (C, C++) | CSE 333: Systems Programming   **SEPTEMBER 2025 - DECEMBER 2025**

Back-End Engineer

- Designed and implemented a modular search engine with a file crawler, inverted index, and query processor
- Built custom chained hash table and doubly-linked list structures in C for high-performance data storage
- Developed a binary serialization system to persist in-memory indices in an architecture-neutral format
- Implemented a multithreaded web server using TCP sockets to enable concurrent file searching & query execution

Kindling (Unity, C#) | Imaginary Game Jam   **JUNE 2025 - JULY 2025**

Solo Developer – Community Favorite

- Developed modular backend systems for a 2D strategy game, using inheritance and composition to organize reusable logic
- Implemented event-driven architecture and coroutines to manage game progression, enemy waves, and combat, ensuring smooth runtime and reactive gameplay
- Designed flexible, data-driven systems with ScriptableObjects to support rapid content updates without code changes
- Iterated on playtester feedback to rebalance difficulty and improve player controls, improving engagement and accessibility

Bug Hunt (Unity, C#) | CSE 457: Computer Graphics   **MAY 2025 - JUNE 2025**

Lead Programmer – 1st Place Winner

- Developed a procedural forest generation pipeline, using randomized polar coordinates and terrain-aware placement
- Designed responsive UI systems to support cutscenes, guide player objectives, and reflect inventory state
- Collaborated remotely with a 3-person team using Git and online communication to streamline collaboration

PROFESSIONAL EXPERIENCE

Paul G. Allen School of Computer Science & Engineering | Seattle, WA   **JANUARY 2026 - MARCH 2026**

Computer Graphics Teaching Assistant

- Mentored 80 students in object-oriented design, modular architecture, and Unity project workflows
- Guided teams in implementing gameplay features including player controllers, camera behavior, event systems, and UI elements
- Reviewed student code for maintainability, performance, and adherence to effective gameplay programming patterns
- Contributed to course material development, including interactive demos and visual learning resources

University of Washington Recreation | Seattle, WA (Remote)   **DECEMBER 2024 - PRESENT**

Web Management Lead

- Maintain 80+ WordPress webpages, optimizing accessibility, SEO, and mobile responsiveness
- Coordinate web strategy with 10 departmental managers, utilizing Asana for project tracking and prioritization
- Implement data-driven updates informed by Google Search Console to improve visibility and engagement metrics
- Preserve 98% site health through DubBot accessibility audits and systematic issue resolution