BRADY MANSKE

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

University of Washington | Seattle, WA **SEPTEMBER 2023 - JUNE 2026**
Bachelor of Science, Computer Science | 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 **DECEMBER 2025 - PRESENT**
Computer Graphics Teaching Assistant
- Mentor 80 students in object-oriented design, modular architecture, and Unity project workflows
- Guide teams in implementing gameplay features including player controllers, camera behavior, event systems, and UI elements
- Review student code for maintainability, performance, and adherence to effective gameplay programming patterns
- Contribute 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