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

TECHNICAL QUALIFICATIONS

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

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

PROFESSIONAL EXPERIENCE

Paul G. Allen School of Computer Science & Engineering | Seattle, WA   DECEMBER 2025 - PRESENT

Computer Graphics Teaching Assistant

- Support 70 students in hierarchical modeling, ray-tracing, and physics simulation through weekly office hours
- Led 5 student teams in Unity game development, emphasizing object-oriented design and event-driven architecture
- Manage course materials across Canvas and public course website, ensuring accuracy and consistency

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

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 & remote 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
- Utilized 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