Donovan Farar

Software Engineer

Location Email Latest Occupation Portfolio LinkedIn

Edgewood, WA dfardev@gmail.com Software Engineer <u>dfardev.github.io (Link)</u> <u>Donovan-farar-dev (Link)</u>

3-year track record of creating and maintaining user-centered software solutions alongside multi-functional teams in a professional environment supporting iterative development. Experience delivering VR software projects in both academic and internship research settings. Passionate about problem solving with user needs in mind, as well as creating efficiencies in game software and fostering a growth environment amongst peers. At my best when solving design challenges in a growth-mindset environment that fosters collaboration with peers. Reliable, thorough, and unafraid of ambiguity.

User-Facing Features with Emphasis on Augmented Reality and Virtual Reality Applications | UX Design and Research | User Studies | UI Design | Game Design | Unity 3D | Agile/Scrum Workflow | C# Gameplay Programming | C++ Gameplay Programming

Work Experience

Software Engineer

Change Healthcare -> Optum Health

Jan 2022 - September 2024

Software engineer utilizing agile methodology to drive cloud migration and database management for Optum/United Health as part of multi-functional SQL DBA and Dev teams. Extended use of Azure cloud, SQL server, Redgate, and other DBA tools/software to perform backend database work including migrating on prem environments to Azure. These works result in faster, lighter solutions by containerizing our healthcare data into form factors that we can read and write to on a need basis.

- Responsible for DBA work pipeline and team management over DBA OPS team to deliver data solutions on a need basis per product team request.
- Developed multiple monitoring solutions for stored cloud data, as well as procedures that cut down our throughput by nearly 10% on databases that were processing billions of healthcare claims per day.
- Each solution was standardized with code-review processes and maintained through Git source control.

UX Engineer/Researcher

SimFit StartUp June 2021 - Jan 2022

Led cross-functional SimFit design and research team to create a user-centered app to gamify workouts utilizing agile sprint methodologies. Deployed extensive, multi-staged user studies to gauge user base and identify best-fit applications for the product, resulting in utilization of Figma, Unity, VR + AR toolkits and Meta Quest II to create requested user-facing features in a functional pipeline working from product to design.

Early stage low fidelity prototype for gamification (figma)

- Responsible for the deployment of low-fidelity prototypes focusing on AR & VR capabilities to increase product gamification based on iterative user feedback.
- Managed team delivery of roughly 1 prototype every 2 weeks and one milestone low fidelity-based prototype per month on an iterative design track.
- Personally developed two VR mockup programs (functioning in Unity engine) for basketball and rowing gamification simulations that the team took into AR iterations in further agile sprint work periods.

Projects

Game Jams

Trick or Treat Towers (Cozy jam 2023) Functioned as gameplay designer/programmer and user design researcher on a team to produce a cozy, spooky tower defense game made with Unity Engine and published to itch.io. <u>Game Link</u> (itch.io)

UW Seattle Certification in Game Design

Dionysian Deck Builder RPG Designed gameplay elements and base player loop for a game that combines RPG-style gameplay with deck building and card battle mechanics.

<u>Game Design Documents Link – Deckbuilder RPG</u> (Google Drive)

Monopoly Rail Race Designed new economy, player loop, and balance curve for a dynamic, fast-paced reimagining of Monopoly as part of a design team.

Game Design Documents Link – Monopoly Rail Race (Google Drive)

Scoop Slinger Functioned as a gameplay designer/programmer and user design researcher on a team to produce a survival horror FPS where players fend off ice cream monsters with scoops of ice cream. Made with Unity and published to itch.io.

<u>Game Link</u> (itch.io – recommend using edge browser for stability)

<u>Game Design Documents Link – Scoop Slinger</u> (Google Drive)

Education

UW Seattle Certificate in Game Design

University of Washington, Seattle

Mar 2023 - Sept 2023

Coursework in game design principles, user experience design, gameplay mechanics, studio roles and iterative development with the goal to produce a final product each quarter and a shipped title by the end of the program.

Master's Degree in Computer Science and Systems

University of Washington, Tacoma

Aug 2020 - May 2023

Coursework in user experience design and research, cloud development, database development, functional programming and virtual reality research.

Bachelor of Science in Computer Science

Gonzaga University - Spokane, Washington

Sept 2016 - May 2020

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Additional Projects

I.H.T.E.F.Y. Feb 2025 – Present

Current Unreal Engine game project I.H.T.E.F.Y. (I Hope This Email Finds You). Leading a small team of cross discipline team members to create an office simulation horror game in Unreal Engine. Currently in the early stages of design and development.

- Responsible for leading cross functional team design discussions.
- Responsible for compiling design concepts from the team and translating them to technical requirements with considerations to overall scope and vision for the project.
- Responsible for programming and creating blueprint functionality of core game mechanics.
- Personally setting up and maintaining source control resources for the team.

UX VR Research Study

Using HMDs of Various Complexity to Compare Gaze-Based and Button-Based Selection Methods Led a student research team to study different VR selection methods (both industry standard and research-based methods) in order to quantitatively and qualitatively determine what selection methods were best suited to virtual environments of varying complexity. Deployed extensive, multi-staged iterative user studies to gauge user base and identify best-fit selection methods, resulting in utilization of Unity, VR + AR toolkits and Meta Quest II.

- Responsible for Unity programming, creation of testing environments, iterative user testing and data collection.
- Managed team delivery of research results and analysis.
- Personally developed multiple VR testing scenarios (functioning in Unity engine) that assessed effectiveness of selection methods (tested on different user bases in iterative stages).

D.R.I.V.R.

Undergraduate Senior Project D.R.I.V.R. (Driving Reality interface in Virtual Reality) Led a student research team to show a proof of concept towards the possibility of utilizing remote control access for autonomous vehicles within virtual environments. Deployed Unity-based demos utilizing RC vehicles, microcomputers + controllers, and VR systems to gauge best fit solutions for a trucking company that tasked my team with creating a mockup training simulation software for their drivers in training. This project resulted in utilization of Unity, VR + AR toolkits and the HTC Vive to create requested features in a functional pipeline working from product to design.

- Responsible for Unity programming towards driving functionality and simulation mechanics between cameras attached to RC vehicles and connections to those cameras via Unity.
- Responsible for user data collection through iterative, multistage interviews and discussions.
- Managed team delivery of prototypes and presentations to communicate progress to the company working with my team.
- Personally delivered multiple VR testing environments and prototypes (functioning in Unity engine) that built upon previous iterations.

Education in VR

Undergraduate Project Worked alongside a student research team to create educational simulations and games in virtual environments for elementary students. Deployed Unity-based applications resulting in utilization of Unity, VR + AR toolkits and the HTC Vive to create educational VR minigames.

- Responsible for Unity programming towards player interactions and Unity data collection.
- Responsible for user data collection through iterative, multistage interviews and discussions with cooperation from local elementary/middle schools and students.
- Managed team delivery of prototypes and presentations to communicate progress with local school districts.
- Personally delivered prototypes centered around different games that specially targeted different areas of elementary education (basic addition in whack-a-mole for example).