Nicholas Wile

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BIOGRAPHY

Kennesaw State University Computer Science graduate with extensive expertise in desktop, mobile app, and video game design & development. Experienced working solo and on teams of up to seven taking on such roles as project manager, team lead, software developer, and UI designer. Currently seeking further education and development positions in the software and gaming industries.

EDUCATION

Kennesaw State University, Summa Cum Laude (3.97 GPA)

Bachelor of Science in Computer Science.

Aug 2018–May 2022

- Minor in Computer Game Design & Development | Game Design & Development Club
- President's List award winner (4.00 GPA) for 7 semesters
- Zell Miller Scholarship award winner (>= 3.70 GPA) for 8 semesters

EXPERIENCE

Web Developer – nicholaswile.github.io

Jun 2022–Present

- Developed front-end pages for a portfolio website based on HTML5 Up's Massively design.
- Optimized performance, accessibility, and SEO using web.dev's Lighthouse auditing tool.
- Programmed with HTML5 / CSS3 and hosted from a remote repository using GitHub Pages.

Independent Video Game Developer – Nicholas Wile Games

Aug 2020–Present

- Developed over five action video games with C# using Unity 3D and deployed to PC & Mac, covering such genres as platformer, first-person shooter, and third-person shooter.
- Designed rules, story, UI, 2D & 3D art; implemented AI, graphics, sound, and gameplay.

Mobile App Developer – "Behind Time" & "Data Syndrome"

Jan 2022–May 2022

- ★ "Behind Time" is a horror-themed adventure game; "Data Syndrome" is a roleplaying game.
- Developed two mobile games with C# using Unity 3D and deployed to Android platforms.
- Designed rules, story, UI, 2D & 3D art; implemented AI, graphics, sound, and gameplay.

UI Designer & Game Developer – "Fuzzy Chess" (team of 7)

Jan 2022–May 2022

- ★ "Fuzzy Chess" is a strategy game where fuzzy logic determines success of chess piece captures.
- Developed with C# using Unity 3D and deployed to PC; source control using GitHub.
- Designed and programmed UI elements including menu system & HUD; developed visual system to support UI scaling for multiple resolutions, refresh rates, and screen sizes.
- Implemented fuzzy logic system and game state manager to determine win/lose states.
- Taught the team how to use Unity and troubleshot engine errors.

Team Lead, Motion Capture Developer – "MoCap Tech Demo" (team of 6)

Feb 2022–Apr 2022

- Shot and processed motion data with OptiTrack; cleaned up animations in Autodesk Maya.
- Implemented 3D computer animation onto a digital character model in the Unity engine.
- Programmed an interface with C# for players to cycle through the animations.

Team Lead, Network Programmer – P2P File Sharing App (team of 3)

Oct 2021–Dec 2021

- Implemented TCP/IP client-server and peer-to-peer network architectures with Java.
- Accomplished audio/video file sharing among computers connected to different routers.

Graphics Developer – OpenGL App & "Adrenaline"

Aug 2021–Dec 2021

- ★ "Adrenaline" is a computer animation about a semi-futuristic baseball tournament.
- Implemented cube mapping & Phong shading to simulate sunlight with OpenGL 4.6 in C++.
- Modeled, rigged, and keyframed digital human character and environment models in Maya.

SKILLS

Programming with C#, Java, C++, C, Python.

Game development using C# with Unity 3D and C++ with Unreal 4 & 5; deploying to PC, Mac, Android.

Source control for collaborative projects using GitHub, Unity VCS, Perforce.

Technical communication, documentation, UML diagrams, Gantt charts.

Scripting, recording, and editing demo videos for projects with DaVinci Resolve.

3D modeling & animation with Autodesk Maya for game development use cases.

Digital art & animation with Adobe Suite, GIMP, Krita, and Clip Studio Paint.

Real-time shader programming using C# with Microsoft's HLSL and C++ with OpenGL 3.3 & 4.3-4.6.

Front-end web development using HTML 5, CSS3 and website hosting with GitHub Pages.

Distributed computing, Java socket programming, TCP/IP, and implementation of client-server & P2P network architectures.

Database ER model and relational schema design; implementation with MySQL.

Test case design and implementation with JUnit 4.0; designing control flow graphs, boundary value analysis.