Pawel Wilczewski

Driven .NET and game developer, passionate about code quality, object-oriented approaches, good state management and maintainability.

pawelwilczewski.github.io

linkedin.com/in/pawel-wilczewski

pawel.wilczewski@outlook.com

Work Experience 🔗 LINK

.NET Programmer `C#` `ASP.NET` `Blazor`
Jaworski Software Solutions Ltd

Contract
February 2024 - Present

- Led set up and implementation of key requirements of node editing web app.
- Applied clean architecture, strongly typed ids, accurate abstraction and relevant design patterns to ensure rapid iteration, maintainability and trivial extendability.
- Used source generation to reduce boilerplate, improve performance and type safety.
- Optimised database roundtrips using caching and well-designed domain model.

Gameplay Programmer `C#` `Unity`
XR Games

Full Time
June 2023 - Present

- Implemented networked narrative system driving game logic with ~150 events and objectives.
- Engineered flexible and robust spawning and combat systems with user-friendly tooling.
- Smoothened out and shortened by 50% level loading to meet platform requirements.
- Safely applied asynchronous approaches to optimise hot paths and reduce lag spikes.
- Integrated platform-specific hardware features such as headset rumble, eye tracking, motion haptics and adaptive triggers for PSVR2®.

Add-on Developer `Python` `Blender`
Self-employed

Part Time
March 2022 - Present

- Developed and published 3 financially successful extensions for Blender.
- Released 12 updates adding new features and ensuring compatibility.
- Applied clean code and SOLID principles allowing easy maintenance and testing.
- Received close to 5-star rating and very positive reviews on all released products.

Game Developer `C++` `Unreal Engine`
Self-employed

Part Time
June 2021 - September 2022 WIP

- Developing large-scale, easy-to-use, networked Unreal Engine FPS template project.
- Using implementation-agnostic design allowing easy integration of custom behaviour.
- Creating intuitive and feature-rich tooling for rapid prototyping and polishing.

Featured Work 🔗 LINK

General-Purpose Node Editor Web App `C#` `ASP.NET` `Blazor`
*2024* 🔗 LINK

Web application developed to facilitate client's need to promptly create, modify and reuse custom workflows repeatedly. The app provides trivial integration of external and internal APIs through dependency injection and minimal setup. Special emphasis was put towards maximising parallelism of nodes execution.

Starship Troopers: Continuum `C#` `Unity`
2024 🔗 LINK

A VR first-person shooter multiplayer co-op game I was working at in XR Games. I was responsible for a multitude of tasks, from creating core gameplay logic, through optimising and polishing, to implementing clean and predictable cross-platform networked functionalities. Based on design, I solely developed advanced features from concept to completion.

ModularFPS `C++` `Unreal Engine`
2022+ 🔗 LINK

Package of flexible components and assets for rapidly creating high-quality FPS games with minimal effort. Using good design principals supported by design patterns and best practices to achieve optimal user experience and high level of flexibility.

Blender Add-ons `Python` `Blender`
2022+ 🔗 LINK

Developed, published and maintained three Blender add-ons in Python. Gained experience in finishing, releasing and supporting digital products.

Puzzle Escape Game `C#` `Unity`
2023 🔗 LINK

Created and published game for XR Futures granting me a position at XR Games.

3D Skinning Tool `C++` `OpenGL`
2023 🔗 LINK

University dissertation project. Tool for tweaking the appearance of 3D animations on rigged 3D meshes. Focused on separation of concerns and appropriate abstractions.

Education

Computer Science, BSc
September 2020 - June 2023
University of Leeds
Graduated with a First-Class Honours degree

Skills

- .NET, ASP.NET, Blazor
- Full Stack Development
- Unity, Unreal Engine
- Gameplay Programming
- Networked Code
- Clean Code & Design Patterns
- Asynchronous & Parallel Code
- Cross-platform & Console Development
- Optimisation & Performance
- Functional Programming
- Managing Technical Debt
- Managing Complex State
- Accurate Abstractions
- Memory Management
- Understanding Low-level Concepts
- Adaptability & Fast Learning

Courses

Mastering Iterative OOD in C# 🔗 LINK
Udemy 2024
Introducing gradual changes while keeping code stable, breaking down problems to manageable sub-problems.

Unreal C++ Multiplayer Master 🔗 LINK
Udemy 2018
Low & high level networking, replication, client- and server-side interpolation, lag compensation and other networking concepts, reliability.

Introduction to Pandas 🔗 LINK
AI Planet 2021
Understanding data processing and analysis techniques.

Languages

- English *full professional proficiency*
- Polish *native*

Interests

- Programming
- Game Development
- Football
- CNC Machines