Franciszek Rakowiecki

Game Developer

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Education

Howest | Digital Arts & Entertainment (DAE) Expected May 2027 Kortrijk, BE

- Pursuing a Game Development degree
- Relevant coursework: Programming, Graphics Programming, Group Projects

Projects

Froggy Engine https://jqsx.vercel.app/froggyengine C++ • OpenGL • GLSL • Custom Game Engine

- Custom game engine built to counter the effects of floating point precision errors on the GPU
  - Consistent 600-1000 base FPS
  - 3,000 point lights • 65,534 batch instances • 20k+ lines of code
- Custom implementations
  - Rendering with OpenGL GLSL shaders
  - Bullet Physics implementation
  - Custom asset manager/bundler solution
  - Custom asset browser and animation controller editor tools
  - Custom reference management system

Vulkan Renderer https://jqsx.vercel.app/vulkanrenderer Graphics Programming • C++ • Vulkan • GLSL

- Built a renderer in C++ using the Vulkan graphics API
- Implemented PBR rendering and deferred lighting

PieRats https://jqsx.vercel.app/pierats Lead Programmer • Unity • C# • Local Multiplayer

- Led & mentored 6 person programming team in developing a 2 to 4 player local multiplayer game
- Experience in, planning, prototyping, developing, and shipping a finished product
- Contributed to gameplay systems, multiplayer functionality and player interaction

Xbox Game Camp GameJam https://jqsx.vercel.app/hungrygames Programmer • Unity • C#

- Led & mentored 3 person programming team in developing a 2 to 4 player local multiplayer game
- Oversaw 20 play testing sessions

Technical Skills

Languages	C++, C#, Java, JavaScript, GLSL, HLSL
Engines	Unity, Unreal
Tech	Git, Perforce, CMake, Maven, CLion, Rider, Visual Studio Code, ShaderGraph, Visual Studio, IntelliJ Idea
Graphics	OpenGL, DirectX, Vulkan