

Arnaud Vanderveken

3D Graphics & Rendering Programmer

't Hof te Overbeke 48, 1082 Brussels - BE

+32 476 03 74 95

vanderveken.arnaud@gmail.com

Arnaud Vanderveken

www.arnaudvanderveken.com

My goal is to work on projects that will bring happiness to lots of people. I focus **Graphics Programming** and the **Rendering Pipeline**, preferably for custom game engines and tools in the AA/AAA industry. Throughout my career, I want to keep myself updated on the latest technologies in these domains, to keep pushing the limits of what's feasible, by working with open-minded colleagues to mutually push ourselves forward.

Skills

Technical Skills

- **Programming languages:** C, C++, HLSL, GLSL, C#, Java, Python, JavaScript
- **Game Engines:** Unreal Engine (4, 5), Unity (BiRP, URP, HDRP), Ubisoft Anvil Engine, Custom Frameworks
- **Graphics API:** DirectX 11/12, Effects Framework for DX11, Vulkan 1.0/1.3
- **Source Control:** Git (Command line, GitHub), Perforce, Plastic SCM
- **Debug/Profiling:** Nvidia NSight, RenderDoc, Proprietary tools, Unity tools
- **Other Software:** Houdini, Blender, Maya, Photoshop, Substance Painter
- **Other skills:** UML charts and diagrams, Miro (and others alike), Task management tools

Soft Skills

- Analytical
- Problem-solving
- Driven

Languages

- French (Native)
- English (Fluent)
- Dutch (Working proficiency)
- Japanese (Learning)

Professional Experience

JUNE 2024 – Present

Graphics Programmer / I-Illusions – Geraardsbergen, Belgium

Worked as the only full-time graphics programmer, with the responsibilities that comes with it. Porting legacy code from the built-in render pipeline to both URP and HDRP to experiment with both pipelines. Programming advanced shaders and custom passes to better suit the needs of the project (i.e. terrain, object-terrain blending shaders). Debugging and analysis with Unity's integrated tools (Frame Debugger, Render Graph Viewer) and RenderDoc. Also helped with FSR 3.1 setup in Shredders. For referencing, contact Dirk Van Welden (CEO) at dirk@i-illusions.com

OCT 2023 – FEB 2024

3D Programmer Trainee / Ubisoft – Annecy, France

Worked on the Anvil Pipeline for a new project. Implemented DLSS3 and fixed some FSR2 issues. Upgraded the editor from DirectX 11 to Vulkan. Graphics debugging with Nsight and RenderDoc. Investigated console crashes. Reworked and optimised existing systems.

SEPT 2022 – SEPT 2023

Team lead for DAE Community / Digital Arts and Entertainment – Kortrijk, Belgium

Started as a regular team member in September 2022 then promoted to team lead as of January 2023. Responsible for organising weekly events and workshops for all the students, to discover new topics, help with the classes and assignments, but also to provide an opportunity for students to unwind and socialise.

JULY 2019 – JUNE 2023

Student Job - Game Master / Enygma Escape Rooms – Brussels, Belgium

Welcome clients, give clear explanations, manage the session to provide the best experience. Help fixing electronic and programming related issues.

Education

SEPT 2020 – JAN 2024

Game Development / Digital Arts and Entertainment – Kortrijk, Belgium

Programming patterns for games. Engine and graphics programming. Gameplay programming. Game design. CMake build system. Tool development. Also, some introduction in 2D and 3D art for games, procedural, environment and lighting.

SEPT 2018 – JUNE 2020

Bachelor Computer Science / Université Libre de Bruxelles – Brussels, Belgium

Python, C/C++, and java programming. Object-oriented design. Operating systems. Networking. Database. Source control. UML charts and diagrams. Algorithms and data structures. Electronics.

Hobbies & Others

- **Games:** Video games | Board games | Table-top role-playing games (Pathfinder, D&D, Cthulhu, as player and game master)
- **Sports:** Archery (competitive level for many years) | Volleyball (hobby at both universities)
- **Music:** Playing guitar, bass and drums | Singing
- **Reading:** Mangas | Tech books about game development, engine and rendering programming