NICK HELLEMANS

nick-hellemans@hotmail.com | +32 471 46 10 96 | Github: <u>@nickhell |</u> LinkedIn: <u>@nickhell</u> Digital resume: <u>https://nickhellemans.github.io/</u>

Education

AP Hogeschool • Bachelor Applied Informatics • Magna Cum Laude

Major: It & Software • Minor: Artificial Intelligence

June 2023 | Antwerp, BE

AP Hogeschool · Associate Degree Programming · Summa Cum Laude

June 2021 | Antwerp, BE

Skills

Languages:

HTML, CSS, JavaScript, C, C++, C#, Python, Java

Technologies and more:

ReactJS, .NET, Tailwind, ThreeJS, OpenGL, NodeJS, Express, MySQL, Firebase, SQL server, MongoDB, Nerfstudio, Docker, Git, Unix, AWS, Unity, AdobeXD, Figma, machine learning

Professional Experience

AP Hogeschool • Al-research Intern

Feb 2023 - June 2023 | Antwerp, BE

- Research within the field of Novel View Synthesis (Computer vision)
- Researched & documented an optimal camera rig to capture data to create photorealistic virtual scenes using Neural Radiance Fields in a cost efficient way
- Researched parameters included: baseline, lens type, NeRF implementation, static/dynamic scenes and alignment/positioning of camera's
- Neural Radiance Development using Nerfstudio framework

BE BOLD • Software Engineer Intern

Feb 2020 - June 2020 | Antwerp, BE

- Built data model exporter web application with React, Node, Express & Firebase
- From analysis to deployment
- Built dashboard to display metrics in office with React
- Intro to marketing

Projects (check out my <u>development portfolio</u> or <u>Github</u> for more details)

Development portfolio • React web application to serve as a digital resume with a showcase of all my skills **Realtime raytracer**

- Built a raytracer in C++ to learn low level graphics programming and all the theory & math behind it
- It supports materials, shadows, an interactive 3D camera, path tracing & multithreading
- Planning to move it entirely to the GPU with Vulkan

MyTreeFarm

- Built a task scheduler for a tree farm company and its employees together with team
- Use of scrum methodology & clean code architecture
- Tracking work with Github projects, performed detailed functional analysis & extensive software testing
- Angular frontend for employees, .NET admin panel, .NET backend to handle data

Teeny Tiny Compiler • Implemented a small compiler in C++ for the language "Teeny Tiny"