Dragan Vuletic

Education

University of Udine

Oct 2021 - May 2024

MS in Computer Science

- o Coursework: Parallel Architecture, Computer Graphics, Game Programming, Computational Geometry
- Thesis: Simulation of translucency in real-time using dynamic sampling based on local contrast

University of Udine

Oct 2017 - Oct 2021

BS in Internet of Things, Big Data and Web

- Coursework: Algorithms and Data Structures, Machine Learning, IoT, Web Development
- Thesis: Automated use of underwater ROVs for seabed exploration and object recognition

Experience

Game Programmer Internship

Udine, IT

HCI Lab - University of Udine

Oct 2023 - Feb 2024

- o Developed in Unity an exergame initially devised for mobile devices Repository Source 🗹
- Integrated VR headset and KAT treadmill support allowing for full movement freedom

Software Engineer Internship

Trieste, IT

XLbit

Feb 2017 - Mar 2017

• Implemented a customizable database filtering system used internally for YesAlps

Projects

DX11 Real-Time Renderer

Repository Source 🗹

- o Developing a real-time renderer for experimental purposes
- o Relevant Features: Render Graph, Multiple SSS Algorithms, PBR
- o Tools Used: C/C++, HLSL, DirectX 11

Approximate MVBB Visualizer

Repository Source

- $\circ\,$ Developed a tool for computing and visualizing the approximate Minimum Volume Bounding Box (MVBB) of a given 3D model
- ∘ Tools Used: C++, Qt, CGAL

Wardrobe Geek Repository Source 🗹

- Developed a smartphone app for managing and sharing your outfits
- o Tools Used: Dart, Flutter

Technical Skills

Languages: C/C++, HLSL, C#, Python, Dart, Haskell, Java, SQL, JavaScript, PHP

Technologies: DirectX 11, CUDA, Node.js, Flutter

Tools: RenderDoc, PIX for Windows, Unity, Visual Studio, CMake

Languages

- Italian (Native)
- o Serbo-Croatian (Native)
- English (Advanced)