Master's Thesis: Real-time Raytracing / Denoising /Neural Rendering

VRVis, Austria's largest research institute for Visual Computing is looking for a student (f/m/d) who would like to give her/his master's thesis an application driven focus.

You will join our R&D-team of highly motivated researchers and software engineers who enjoy finding innovative solutions in a constructive and friendly atmosphere.

About the project:

As part of our interactive lighting design tool HILITE we continuously develop new rendering and simulation techniques to improve the planning workflow. Recent advances in real-time raytracing, denoising and neural rendering show interesting opportunities that we want to explore in the scope of a master's thesis.
We have multiple ideas, such as a global illumination algorithm, denoising improvements, luminaire near-field rendering, but are also open to own suggestions as long as there is a connection to the application of lighting design.

What your tasks will be:

- Familiarize yourself with the relevant state of the art
- Develop a novel technique/algorithm and evaluate its improvements compared to a reference solution
- Implement a demo application using the Aardvark platform (open source)

What you will bring to the team:

- Strong interest in the topic of choice
- Solid programming skills
- Motivation to learn new technologies (F#, Aardvark, FShade)
- Enthusiasm for open source development and scientific practices

We offer supervision and guidance as well as remuneration upon successful thesis completion.

Applications are welcome:

Please contact Mr. Christian Luksch to learn more about the project and send in your application via

luksch@vrvis.at

We are looking forward to hearing from you.

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