BUILDING FUTURES
A CHALMERS AREA OF ADVANCE

CHALMERS
UNIVERSITY OF TECHNOLOGY

Virtual City @CHALMERS

...is looking for **M.Sc. students!**

We are looking for talented students to carry out their thesis work within our group. We offer a great opportunity to work in a cutting-edge research project and combine state-of-the-art technologies with fundamental computational methods. Depending on external funding the position can be extended after graduation. The starting date is "*as soon as possible*"!

Some suggested topics include:

Computer Science
- VirtualCity@Chalmers related implementation (Unreal Engine API or any Web API).
- Computational Fluid Dynamics integration and visualisation in Unreal Engine.
- Virtual Reality capabilities in Unreal Engine.
- High Performance Computing extensions to VirtualCity@Chalmers.
- BigData extensions to VirtualCity@Chalmers.

Computational Mathematics
- Turbulence modeling for urban scale simulations.
- Case Study: Fluid-structure interaction simulation for "Linbana Göteborg".
- Case Study: Flooding simulation for Frihamnen.
- Traffic simulation based on synthetic population models.
- Simulation of pollution on the urban scale.
- Procedural/algorithmic generation of cities in Unreal Engine.

Visit http://virtualcity.chalmers.se/ for more information.

For questions and applications, please contact:

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In January 2018, Chalmers launched the interdisciplinary project **VirtualCity@Chalmers**. The project is initiated by the Area of Advance Building Futures and aims to build a virtual twin of the two campus sites modeled as an immersive 3D world. We are currently building our prototype. Some of the main features include real-time coupling to some of Chalmers' simulation/research software platforms and MR/VR capabilities powered by Unreal Engine.

In collaboration with:

City of Gothenburg
http://goteborg.se

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