Torben Steegmann

Portfolio: www.torbensteegmann.com
GitHub: www.github.com/TorbenSteegmann
Contact: steegmanntorben@gmail.com

General Information:

Date of birth: 04/18/2000
Place of birth: Hong Kong
Nationality: German

Technical Skills:

- C++
- Physics Simulation
  - Constrained Dynamics
  - Complementary Dynamics
  - Fluid Dynamics
  - Quantum Dynamics
- Computer Graphics
  - OpenGL
  - Metal
  - Rasterization
  - Ray Tracing
  - Computer Vision
  - Virtual Reality
  - Unreal Engine
  - Blender
- Web development
  - React
  - JS
  - Python

Soft Skills & Hobbies:

- Communication
- Teamwork
- Ambition
- Desire to learn and improve
- Independence
- Flexibility
- Competitive Gaming

Career Objective:

Dedicated, **project-driven** student with a strong passion for **physics simulation** and **computer graphics**. Eager to apply and enhance my skill set through real software applications. **Excited** about the prospect of **learning from experts** in the field and the opportunity to contribute to the **creation** and **improvement** of software.

Projects:

- **Live GPU Ray Tracing Engine**
  - Written in Swift, Metal, C++
- **FLIP Fluid Simulation**
  - Written in C++
  - Rendered in Own Custom Physics Engine
- **Multi-Threaded CPU Ray Tracer**
- **Library for Accelerating Octagonal Relations**
  - Reimplemented and Refined State-of-Art Algorithm for Software Verification in C++
- **Hamnu**
  - Online PvP Game Written in Unreal Engine
  - Currently Reworking it to Pure C++/OpenGL

Work Experience:

- **Virtual Reality Lab [04/2024 - 07/2024]**
  - Internship
  - Implemented Several Interaction Methods in VR-Software in Unreal Engine 5
- **Cyber-Physical Mobility lab [10/2022 - 01/2023]**
  - Internship
  - Implemented an Autonomous Package Delivery System on Small Remote Controlled Cars in C++

Education:

- **Tsinghua University [02/2025 - 08/2025]**
  RWTH Aachen Ambassador
- **M.Sc. Computer Science [10/2023 - 03/2026]**
  RWTH Aachen
- **B.Sc. Computer Science [04/2020 - 09/2023]**
  RWTH Aachen
- **B.Sc. Applied Computer Science [10/2018 - 03/2020]**
  RWU, Ravensburg-Weingarten