### **CURRICULUM**

# **BENJAMIN KAHL**

## Where to find me

github.com/Helliaca



linkedin.com/in/benjamin-kahl



benjamin.kahl.fi



benjamin@kahl.fi



## Software development

Unity/Unreal	••••
C++/.Net/C#	••••
OpenGL/DirectX	
Django / Pytorch	
ROS	

## Languages

German	••••
English*	••••
Spanish	••••
Finnish	

<sup>\*:</sup> IELTS Academic certificate

## Work experience

12/2022 - present

**VR Developer (full-time)** at the Max-Planck Institute for Human Development

- Building VR development frameworks
- Advising on feasibility, technology an concepts
- Building experiments and studies with Unity, Unreal etc.

11/2021 - 12/2022

Research Assistant (part-time) at SCIoI (scienceofintelligence.de)

- Technical support
- Developing 3D foraging experiments.

10/2019 - 11/2021

**VR Developer (part-time)** at the Max-Planck Institute for Human Development

- Building VR development frameworks
- Building psychology experiments with Unity or as Java applications
- Building tools for visibility determination in virtual environments
- Data analysis with C#/Python

03/2017 - 06/2017

Internship, (Full Stack Developer) at Futurice, Berlin

- Web development with Django and Python
- Frontend-design and development with Javascript, HTML and CSS
- Database-management with PostgreSQL

### **Education**

2018 - 11/2022

Master of Science, Computer Science, Free University of Berlin

- Thesis mark: 1.0 (Topic: Hardware Acceleration of Progressive Refinement Radiosity using Nvidia RTX)
- Preliminary mark: 1.3

2014 - 2018

**Bachelor of Science**, Computer Science, Free University of Berlin

- Thesis mark: 1.0 (Topic: Real-Time Global Illumination Using OpenGL and Voxel Cone Tracing)
- Overall mark: 2.2

2013 - 2014

Bachelor Studies, Chemistry, Free University of Berlin

- Non-organic chemistry lab traineeship
- Average mark: 3.0

2001 - 2013

**High School Graduation**, (Abitur, Gymnasium), German School of Madrid

Average mark: 1.9

1999 - 2007

Weekend-Schooling, Finnish School of Madrid

### **Skills**

### **Programming Languages**

- Over 10 years of programming experience and in-depth knowledge in C++, C# and Java.
- Substantial experience with Python and Lua.
- Practical experience with SQL, JavaScript, HTML and CSS.
- Practical experience coding in graphics environments with GLSL, HLSL and CG/Shaderlab.

#### **Frameworks**

- Excellent knowledge of rendering-engines, particularly Unity3D.
- In-depth knowledge of computer graphics libraries such as Falcor, SFML and SDL as well as standards such as OpenGL and DirectX.
- Practical experience in web-development with Django.
- Know-how of generic robotics frameworks utilizing ROS.
- Experience with GPU-based machine learning through CUDA and pytorch

#### Other

- Wide and diverse skillset overarching the entire game development stack, including:
- Modelling, texturing, and simulating in Blender,
- Image and texture editing with Adobe Photoshop,
- Video-editing with Adobe Premiere
- Molecular dynamics simulations with GROMACS