### 1 Personal details

Ingemar Markström, Tranebergsvägen 60, 16744 Bromma. Email: ingemar.markstrom@gmail.com, phone: +46~707~45~06~59.

### 2 Education and Academia

### 2.1 Degrees

Bachelor of Science in computer science 2015 (thesis subject: Scheduling workers to time slots). Master's degree in Computer Science (computer graphics) estimated fall of 2018 (thesis subject: Point cloud rendering).

### 2.2 Notable courses in education

Notable courses of interest, graded A: (DH2323) Computer Graphics and Interaction, (DD2488) Compiler Construction, (DH2321) Information Visualization, (DH2413) Advanced Graphics and Interaction, (DH2650) Computer Game Design, (DD2387) Program System Construction Using C++, (DH2642) Interaction Programming and the Dynamic Web, (DA2190) General Cultural Knowledge.

## 2.3 Teaching

I have lectured programming at KTH Campus Valhallavägen (2006-2016), with responsibility for preparing and delivering high quality presentations at lectures, oral examination, grading, and also administration of students. Some courses are: Programming technique { (DD1310) (DD1311) (DD1314) (DD1315) (DD1316) (DD1343) }, Applied Computer Science { (DD1320) (DD1321) (DD1322) (DD1324) (DD1325) (DD1332) }, Introduction to Computer Science { (DD1341) (DD1339) (DD1337) (DD1338) (DD1349) (DD1396) }, Programming Paradigms (DD1361), Program System Construction Using C++ (DD2387), and Internet Programming: (DD2390).

#### 2.4 Publications

I am a co-author on a paper about tie knots, which can be found here:  $\rightarrow$  More ties than we thought.

### 3 Portfolio

During the Master's education I have been involved in projects focused on 3D graphics, visualisation, virtual and augmented reality, and computer interaction design in general, some also presented and demoed at events such as ComicCon and C-awards.

- CoCar: Asymetric racing game, Unity3D, VR, nominated in three categories and won one at C-Awards at Visualisering scenter C in 2017. More information the homepage (www.cocar.se).
- Sarkofag: Giving the user the impression of carving through a real world box, Augmented reality, Unity3D, revealing its inside. Also nominated at C-awards 2017, more information at the homepage (www.sarkofag.se).
- CourseRunner: A new search engine for courses at KTH in the shape of a treemap. Information Visualization, also nominated for a category at C-awards 2017, a promotion video can be seen  $\rightarrow$  here.
- Off Hue Goe: A game developed in the Computer Game Design course. Built with Unreal Engine, and a summary of my efforts can be read  $\rightarrow$  here (blogspot) and the project  $\rightarrow$  homepage is (www.offhuego.com).
- The sailboat: A more shader oriented project in Unity3D. The final report can be found  $\rightarrow$  here and work progress (including video) can be found  $\rightarrow$  here.
- The particle system, OpenGL+CL: A weekend project demo of a hardware rendered and parallell computed particle system using OpenGL and OpenCL simulating black holes in space, with some simple user interaction possibilities. A short video demonstration can be seen → here.

# 4 I know

C++, Java, Python, OpenGL, Lighting and rendering theory, Javascript, Prolog, Scala, Haskell and some Elisp, Git, CMake, Algorithm design and complexity theory, HTML, CSS, and some D3. What is not listed or I do not already know, I can learn.