

# LESLEY VAN HOEK

Software developer, researcher, and artist in creative technology

 May 21, 1995, Breda  Rotterdam, The Netherlands  lesleyvanhoek.nl  lesleyvanhoek@hotmail.com  
 lesleyvanhoek  Ishoek

## EDUCATION

MSc Media Technology

**Leiden University**

 Sept. 2018 – Sept. 2020  Leiden, The Netherlands

- Wrote my master's thesis "Evolving Virtual Embodied Agents using External Artifact Evaluations."
- Completed the courses: Deep Learning & Neural Networks; Evolutionary Algorithms; Human Computer Interaction; Non-Human Cognition; Scientific Narration & Visualization; Sound, Space & Interaction etc.
- Worked as a teaching assistant for the courses "Introduction to Video Game Making" and "New Media & New Technologies."

BSc Computer Science

**Avans University of Applied Sciences**

 Sept. 2012 – Aug. 2016  Breda, The Netherlands

- Wrote a case study report "Enhancing Visual Realism of Virtual Objects in Mobile Augmented Reality Applications using Unity3D."
- Completed the courses: Algorithms; 3D Computer Graphics; Computer Vision; Mixed Reality; Databases, Design Patterns; Network technology; Digital Signal Processing; User Experience & Interaction etc.

Minor Games Technology

**Stuttgart Media University**

 Sept. 2015 – Feb. 2016  Stuttgart, Germany

- Completed the courses: Game Engine Programming; Computer Graphics; Programming Massively Parallel Processors; Gameplay Programming; Practical & Theoretical Game Development etc.

## ACCOMPLISHMENTS

### Publications

- van Hoek, L., Saunders, R. & de Kleijn, R. (Forthcoming). "Evolving Virtual Embodied Agents using External Artifact Evaluations". Springer Communications in Computer and Information Science.

### Awards

- Best Video Award. BNAIC/BeneLearn 2020 (Benelux Conference on Artificial Intelligence and Machine Learning)

## EMPLOYMENT

Software Engineer

**NAP Labs + NAP Framework**

 Jan. 2020 – present  Amsterdam, The Netherlands

- NAP is an open-source real-time control & visualization platform used to build large audiovisual installations & control high-precision robotics.
- Made essential contributions to the (render) engine and wrote software for a wide range of demanding art installations.

## SOFTWARE

### Programming languages

C++ C Python C# Java  
R Lua

### Tools & frameworks

NAP Framework Vulkan  
OpenGL/GLSL OpenCV  
Tensorflow 2 Pytorch  
Bullet Physics openFrameworks  
Unity Engine Arduino Pure Data  
Processing

### Version control

Git

## LANGUAGES

### Dutch

Native language

### English

C2 full professional proficiency (certified, University of Cambridge)

### German

B1 limited working proficiency (certified, Stuttgart Media University)

## OTHER

### Driver's license

Category B

## PORTFOLIO

 [lesleyvanhoek.nl](https://lesleyvanhoek.nl)

Please refer to my homepage for a more extensive overview of my technical, scientific and artistic work.

## Unity Developer

### TWNKLS Augmented Reality

📅 Dec. 2017 – Sept. 2018      📍 Rotterdam, The Netherlands

- Developed AR applications for mobile, among which Augmented Blue-ware for Royal Delft.
  - Creative research and development of tools (e.g. special effects) to increase fidelity of future projects.
- 

## Graphics Developer

### NEP Graphics

📅 Dec. 2016 – Sept. 2017      📍 Hilversum, The Netherlands

- Contributed to graphics systems deployed at various customers under which the Dutch national broadcasting station (NOS).
  - Developed a plugin API for Square; a controller application for displaying graphics on multiple displays.
- 

## Software Development intern

### RE'FLEKT GmbH

📅 Feb. 2016 – Jul. 2016      📍 Munich, Germany

- Carried out a case study on enhancing visual realism of virtual objects in AR environments.
- Developed AR iOS application for Hyperloop Transportation Technologies with Unity3D.
- Wrote custom shader programs and optimized for mobile devices.

## EXHIBITIONS

---

### Sonaural

And so on, and so forth; WORM, Rotterdam (2020)

### Certainty Expo

And so on, and so forth; \_V2, Rotterdam (2019)

### Parallels Expo

Artefacts of Verisimilitudes; Peron E, Utrecht (2019)