

LESLEY VAN HOEK

Software engineer, researcher, and artist in creative technology

📅 May 21, 1995

📍 Rotterdam, The Netherlands

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🔗 [Ishoek](#)

EMPLOYMENT

Senior Software Engineer

Studio DRIFT

📅 Apr. 2024 – present

📍 Amsterdam, The Netherlands

- Build high-performance software for permanent large-scale real-time audiovisual and motor-controlled artworks in NAP.
- Solve unique complex problems w/ custom algorithms/solutions i.e. custom render pipelines, 3D fluid simulation, EtherCAT MainDevice etc.

Software Engineer

NAP Labs + NAP Framework

📅 Jan. 2020 – Apr. 2024

📍 Amsterdam, The Netherlands

- NAP is an open-source real-time control & visualization platform used to build large audiovisual installations & control high-precision robotics.
- Made large contributions to NAP (mostly the Vulkan render engine) & built software for many demanding professional art installations.

Unity Developer

TWNKLS Augmented Reality

📅 Dec. 2017 – Sept. 2018

📍 Rotterdam, The Netherlands

- Developed AR applications for mobile devices, among which 'Augmented Blueware' for Royal Delft.

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).

Software Development intern

RE'FLEKT GmbH

📅 Feb. 2016 – Jul. 2016

📍 Munich, Germany

- Case study: Enhancing visual realism of virtual objects in AR envs.

EDUCATION

MSc Creative Intelligence & 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."

SOFTWARE

Programming languages

C++

C

Python

C#

Tools & frameworks

NAP

Vulkan

OpenGL/GLSL

OpenCV

Tensorflow 2

Pytorch

Bullet Physics

openFrameworks

Unity

Arduino

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

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

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.
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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.
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Awards

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

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)