## PROFESSIONAL SUMMARY

Dynamic and motivated programming champion with career-long record of software engineering, game development, and VR experience success for leading organizations

Creative, results-driven, multilingual Game Developer highly regarded for developing applications which meet and exceed demanding corporate and client requirements. Sought for superb analytical skills, with the ability to solve challenging problems using a combination of industry standard and cutting-edge technologies, including Unity3D, C#, and Unreal Engine, to deliver clean, well-structured code. Proven expertise in designing and developing compelling AR and VR experiences. Skillset to work compatibly with clients to understand requirements and develop products that exceed quality expectations with on-time delivery. Strong leadership skills with experience working in a team environment, able to collaborate with individuals from diverse backgrounds. Exceptional academic qualifications include a Bachelor Degree in Computer Science from Vrije University.

#### **CORE COMPETENCIES**

- Software Engineering
- Real Time Networking

- Game Development
- User Experience Design
- Optimization

- Virtual Reality
- Programming
- Prototyping

## PROFESSIONAL EXPERIENCE

MTR, REMOTE CONSULTANT AUGUST 2022 — PRESENT

### SENIOR VR DEVELOPER, PROTOTYPING AND OPTIMIZATION EXPERT

- At MTR joined a development team aiming to replace an expensive location-based simulator with a VR Multiplayer experience.
- Implemented accurate MTR Train user interface according to the experts.
- Made sure the application properly synchronized across all multiplayer clients.
- Optimized the scenery to ensure it can maintain target framerate on an Oculus Quest 2 headset.

NOKNOK, REMOTE, MARCH 2020 — APRIL 2022

#### **LEAD VR DEVELOPER**

- Orchestrate the development of a VR networked office application.
- Facilitate the transition from developing solely VR office solutions to providing a VR content creation platform.
- Support operations within a startup environment by dynamically adapting to rapidly changing needs.
- Design application components in alignment with business and user requirements.
- Ideate, design, and implement creative and innovative projects for experiences in VR.
- Incorporate user-centered design principles to optimize the user experience.
- Engage in iterative product development to deliver an exceptional product, assessing and redesigning application components as needed.
- Architect efficient and reusable systems to support the VR application.
- Leverage powerful tools throughout application development, including Unity3D, C#, Firebase, React, NodeJS, and Photon Engine.

CROZZROADS, AMSTERDAM, THE NETHERLANDS, OCTOBER 2017 — MARCH 2020

#### **SOFTWARE ENGINEER**

- Advanced the development of real-time real estate visualization applications using Unity3D, C#, Unreal Engine, C++, Solidity, Python, and JavaScript.
- Modelled VR components based on real-world real estate features and details.
- Collaborated with multi-functional teams to facilitate product development and achieve compelling experiences.
- Implemented and tested machine learning concepts to enhance the use of applications.
- Conducted extensive blockchain research to integrate insights into application development.

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Prototyped new interactions and features with a strong strategic focus on usability.

LEVEL ONE GAMES, BUDAPEST, HUNGARY, JUNE 2017 — DECEMBER 2017

#### **GAME DEVELOPER**

- Optimized a built-in level editor for the Leashed Soul game using Unity3D, C#, and Steam API.
- Reviewed project requirements to transform concept into reality through iterative product development.
- Integrated the game into the Steam workshop platform, allowing players to create their own levels for the game.
- Upheld the company's design style and game construction standards throughout development.
- Interfaced with internal and external teams to gather feedback and incorporate innovations.

KITCHEN BUDAPEST, BUDAPEST, HUNGARY, SEPTEMBER 2016 — SEPTEMBER 2017

### **TALENT MEMBER**

- Built a multiplayer VR "capture the flag" game using Unity3D and C#.
- Partnered with a team of six other individuals in Kitchen Budapest's innovation lab to advance project objectives.
- Delegated tasks among group members to ensure timely and satisfactory completion of all project components.
- Tested the game throughout development to assess functionality and guide future actions.
- Gathered user feedback to identify areas needing improvement and implement optimizations to enhance usability.

## **PROJECT EXPERIENCE**

DEVILCOW STUDIOS, MARCH 2020 - JANUARY 2023

### **PATHCRAFT, VR PUZZLE GAME**

- Orchestrated the original design and development of PathCraft, an engaging, VR Puzzle game.
- Spearheaded game creation from initial conceptualization to final launch.
- Secured and delegated funding from Vertigo Games to support game development.
- Incorporated user-centered design principles to optimize the VR experience.
- Developed all project components in preparation for independent publishing by Vertigo Games.
- Monitored project progress to ensure continuous adherence to timelines and budgets in order to publish the game in a timely manner.
- Had the chance to present PathCraft at Gamescom 2022 to press at the Plaion booth.
- Launched on the Oculus Quest store in 2023 January.

VRIJE UNIVERSITY, AMSTERDAM, THE NETHERLANDS, JANUARY 2021

### **EFFECTS OF VR ON THE VESTIBULAR SYSTEM**

- Programmed an application to supplement a Master's Thesis experiment in which users attempted to balance a rod in VR to make it completely horizontal while facing a rotationally offset environment.
- Quantitatively measured whether the participant's view within the application would influence their sense of balance.
- Integrated features to display various backgrounds and environments to the user with a given angle.
- Allowed for a high degree of customizability by allowing the experiment conductor to apply a large number of variables in the project.
- Adhered to strict project requirements throughout application development.
- Identified and diagnosed any technical issues, troubleshooting to restore full functionality.
- Presented the final product by explaining application construction and use.

VRIJE UNIVERSITY DEMONSTRATOR LAB, AMSTERDAM, THE NETHERLANDS, FEBRUARY 2018

#### **VR MOLECULE REPRESENTATION SOFTWARE**

- Pioneered a VR software to display a 3D representation of molecules.
- Improved the software and representations by gathering feedback from colleagues and implementing insights into development.
- Researched scientific information necessary to create a realistic molecule representation.
- Modelled molecules in specialized software to understand and incorporate necessary components.

CSEPPKE, BUDAPEST, HUNGARY, MARCH 2020

### **AR APPLICATION**

https://cseppke.hu/lp/136-cseppke\_tente\_app

• Created an innovative AR application to project cartoons over children's clothes.

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- Emphasized usability throughout product development to ensure intuitive interaction by users of all ages.
- Gathered or created the necessary visuals to incorporate into the application.
- Leveraged an in-depth understanding of AR principles to guide project advancement.

INDEPENDENT PROJECT, JANUARY 2022

### **WEBXR INTERACTION FRAMEWORK**

- Utilized PlayCanvas, a web-based game engine, to create a WebXR interaction framework.
- Transformed concepts into real features using PlayCanvas tools.
- Assessed the final product to evaluate usability and quality, implementing improvements as needed.

## **EDUCATION AND CREDENTIALS**

#### BACHELOR OF SCIENCE (B.Sc.) IN COMPUTER SCIENCE, 2020

Vrije University, Amsterdam, The Netherlands

Minor: Deep Programming

Thesis: "Human Computer Interaction: A Comparison of Communication Effectiveness Between Virtual

Reality and Video Conferencing"

## **TECHNICAL PROFICIENCIES**

### Languages:

- C#
- Python
- C++
- C
- JavaScript
- Solidity

#### **Tools:**

- Unity3D
- Unreal Engine
- PlayCanvas
- Firebase
- Git
- React

#### Other:

- Blender
- ShaderGraph
- HLSL
- ECS

## **PROFESSIONAL ACHIEVEMENTS**

OCULUS START PROGRAM, OCULUS, META, FEBRUARY — PRESENT

#### **MEMBER**

• Demonstrated PathCraft to John Carmack at Oculus Connect.

GAMESCOM, COLOGNE AUGUST

#### **PRESENTER**

Showcased my game PathCraft at GamesCom at the Plaion Booth.

# **ADDITIONAL INFORMATION**

**Languages:** English, Hungarian, Korean **Interests:** Ice hockey, video games, pets