# CIPRIAN FLOREA

SOFTWARE
ENGINEER

ciprianf.res@gmail.com

+358 41 7552675

https://cipofl.github.io/

## WORK HISTORY

**Software Consultant**
**VividWorks, Oulu, Finland, 2020 to Present**

- Full stack engineer developing online 3D design-to-purchase SaaS platform solutions.
- Customer consultation, guidance, and training.

**Research and Teaching Assistant**
**University of Oulu, Center for Ubiquitous Computing, Oulu, Finland, 2017 to 2019**

- Research and development in ubiquitous computing and perception engineering. Part of the unit supervised by Prof. Steven LaValle, co-founder of Oculus VR.
- Developed web and virtual reality applications covering topics such as WebVR, user involvement, 3D user interfaces, 3D game engines, smart city.
- Assisted Dr. Anna LaValle, Oculus research scientist, in teaching a course titled VR Systems and Humans that covered VR systems, human physiology, human perception and neuroscience, perceptual training, comfort and VR sickness.
- Worked with researchers from different backgrounds including engineers, designers, and user experience experts.

**Software Developer**
**Playsign Ltd, Oulu, Finland, 2015 to 2017**

- Designed and developed interactive urban planning tools, VR apps, and 2D mobile games.
- Developed Co-design by Playing, a co-design, communication and game-like 3D-environments tool, and MindMyths, an immersive mindful meditation VR app.

**Programmer**
**Happy Hobgoblin Ltd, Oulu, Finland, 2014 to 2015**

- Developed a multiplatform digital board game, later published on Steam, Google Play, and App Store.

## ACADEMIC BACKGROUND

**Master of Science in Technology in Computer Science and Engineering**
**University of Oulu, Oulu, Finland, 2018 to 2019**

Thesis: Virtual reality interface for the PATIO user involvement tool

**Bachelor's in Computer and Software Engineering**
**Politehnica University of Timișoara, Timișoara, Romania, 2012 to 2016**

Thesis: Co-design by playing

## ADDITIONAL TRAINING AND EDUCATION

**Workshop: From Reality to Virtuality: The Science and Art of Creating VR Experiences**
**University of Oulu, Oulu, Finland, 2019**

Studied software and VR frameworks, 3D user interfaces, and multimodal immersive user experiences.

**Workshop: Virtual City Models**
**University of Oulu, Oulu, Finland, 2017**

Studied a virtual 3D city pipeline and techniques to acquire, process and visualize urban data.

**Oulu Game Lab**
**Oulu University of Applied Sciences, Oulu, Finland, 2014 to 2015**

Training and development program focusing on the gaming industry.

**Certificate in Advanced Topics in 3D Computer Graphics**
**Saguaro Technology Inc., Timișoara, Romania, 2014**

Studied 3D computer graphics: the world we see vs. the world we render, patterns used in game engines, optimizing the level of detail, graphic engines, animations and collisions.

## PUBLICATIONS

Florea et al. (2019). **Extending a User Involvement Tool with Virtual and Augmented Reality**. In IEEE VR 2019.

Alatalo et al. (2017, June). **Two real-world case studies on 3D web applications for participatory urban planning**. In Proceedings of the 22nd International Conference on 3D Web Technology (p. 11). ACM.

## ADDITIONAL PROJECTS

**Virtual Library:** Helped implement a VR application developed together with the Oulu City Library. Users can explore the Virtual Library through a VR headset.

**User Involvement Tool PATIO:** Created a VR client for user feedback collection, and a web tool that works as a moderator creation editor. These tools offer an approach to collecting feedback about activities taking place in VR 3D spaces.

**GoNature Augmented:** Integrated a plant identification machine learning solution into an online gamified mobile app that collects and identifies plant types using image recognition.

**CommentHunter:** An Android app for storing messages in a specific location.

**LimpingApp:** An Android app for measuring gait movement by leveraging a smartphone's accelerometer sensor.

**HateSpeechApp:** A program for recognizing and categorizing hate speech from reddit comments using natural language processing techniques.

## PROFESSIONAL SKILLS

| | | | |
|---|---|---|---|
| C# | Web Development | VR & WebVR, AR, MR | Unity Platform |
| Git | Game Development | Cloud Computing, Microsoft Azure | REST API |
| Research & Teaching | 3D Visualization, Graphics, UI & UX | Photogrammetry | |

## LANGUAGE SKILLS

| | | |
|---|---|---|
| English | Romanian | Finnish (beginner) |

## RECOMMENDATIONS

On request.