

## Skills

### Languages

**Code:** C++, C#, Python, GLSL/HLSL  
**Web:** HTML, CSS, PHP, JS, React, NPM/Yarn, NodeJS, Flask, SemanticUI, Webpack, Babel, WebGL, jQuery  
**Lib/Tech:** Boost, QT, WPF, OpenGL, DirectX, Mono, MySql, MongoDB, AWS, OpenCV, Make, Arduino, RPI  
**Human:** English, Dutch

### Software

**3D Engines:** Unity, Unreal, XNA  
**Development:** Visual Studio, MonoDevelop, VSCode, XCode, Git, Perforce, SVN, Jira, Confluence  
**Content Creation:** Photoshop, Maya, 3DS Max, Blender, Houdini FX, Illustrator, After Effects

## Experience

### Ubisoft - Montréal, Canada

Procedural Generation Engineer

Jun 2016 - Aug 2017

- ▶ Worked on Far Cry 5 (2018 launch, an open-world action game for PS4/XboxOne)
- ▶ Created procedural tools used to populate large levels with vegetation, roads, rivers and infrastructure
- ▶ Implemented an efficient simulated water surface generation toolset that required minimal user input

### Turbo Studios - New York, NY

Front End Engineer, Graphics Engineer

Apr 2014 - Jan 2016

- ▶ Worked on Super Senso (2016, strategy game for iOS/Android)
- ▶ Lead the 3D graphics efforts for the game (Optimization, VFX, Shaders, PostFX)
- ▶ Implemented large parts of the front end (Slicing/Atlasing/Layout/Animation/Implementation)
- ▶ Provided technical direction, training, and support for the art team (Set content budgets and constraints)
- ▶ Architected and implemented an efficient content creation pipeline
- ▶ Implemented various game specific systems like cameras and in-game user feedback elements
- ▶ Created a system to externalize game assets and minimize app size (AssetBundles/Amazon S3)

### Zynga (NaturalMotion, BossAlien) - Brighton, UK

Lead Technical Artist, Graphics Engineer

Sep 2011 - Mar 2014

- ▶ Worked on CSR Racing and CSR Classics (2012, top grossing games on iOS and Android app stores)
- ▶ Implemented a realtime reflection renderer, realistic car shaders, and a runtime decal system
- ▶ Created a content and visual effects pipeline for high definition 3D car assets
- ▶ Implemented various game systems like UI, cameras, environments and effects
- ▶ Developed procedural generation tools for roads and city blocks with SideFx Houdini and Unity3D

### Disney Interactive Studios (Black Rock) - Brighton, UK

Technical Artist

Feb 2010 - Sep 2011

- ▶ Worked on Split/Second: Velocity (2010, racing game for PS3/XBox360)
- ▶ Implemented new content pipelines as the art team shifted from proprietary tools to Autodesk Maya
- ▶ Research into shader authoring tools and tool development with the Autodesk Maya C++ API

Neopica, 3D Artist Intern - Gent, Belgium

Jul 2009 - Sep 2009

ATX, Graphic Designer/Web Developer - Gent, Belgium

Jul 2006 - May 2010

## Extra

### Education

#### Machine Learning Certificate (2016)

Stanford University on Coursera

Course on ML techniques (SVN, Kernels, Neural nets)

#### Digital Arts and Entertainment (2007-2010)

HOWEST, Kortrijk, Belgium

Bachelor degree in computer science and digital arts

Graduated magna cum laude

Awarded the prize for best student game project

### Projects & Interests

#### Personal:

ShortcutMapper: keyboard shortcuts visualizer

Ambilight: live ambient light rig for backlit televisions

UrbanFarm: IOT auto irrigation system for home farm

Garage3D: unity 3D car scene demo

**Interests:** machine learning, computer vision, data-vis, blockchain, fintech, cryptography, generative design, geometry, interactivity, urban farming, social issues