

# Maximilian Stürzl

Email: maxplayyt@gmail.com

<https://www.maxstuerzl.com>

## Profile

I am a game programmer and level designer, located in Frankfurt, Germany.

## Employment History

**Sixteen Tons Entertainment**, Tübingen (February 2019 to Present)

**Lead Programmer,**

UI, Gameplay, Tools, Backend and Systems programming for EMERGENCY and EMERGENCY HQ.

- *UI Programming:* Worked on most of the UI in EMERGENCY including layout, shaders, optimization, animations (Blueprint and code based) mostly in C++ using both UMG and Slate but also in Blueprint, as well as UI scripting for EMERGENCY HQ
- *Gameplay Programming:* Gameplay programming in Unreal Engine 5 in C++ (mainly) and Blueprints (when needed)
- *System Programming:* Designed and implemented systems that interact with each other on a game wide level
- *Tools Programming:* C++ based tool development both in UnrealEd and in the game itself as well as backend and code generation tools outside of the game (C#/.Net). Also worked on improvements on the testing tools used in EMERGENCY HQ and some tools to fetch and reset data for the game
- *Backend development:* Worked and managed a lot of the backend for EMERGENCY using technologies like Microsofts PlayFab and Azure
- *Multiplatform development:* Worked on multiplatform features in both EMERGENCY and EMERGENCY HQ, including frontend-backend communication, authentication, user-to-user interaction, in-app-purchases, multiplayer and backend

**GearEight Games**, Schwetzingen (2017 to 2022)

**Co-Founder and Programmer,**

Founded the company and released the game *DRAG* mid 2017 for Android and January 2018 for iOS.

- *Programming:* Technical Director and Programmer in a 2-guys Team
- *Tools Programming:* Wrote level editors and management tools, as well as multiple plugins for Unity, including a localizer
- *Game Design:* Game Design and management role for all projects
- *Co-Founder*

**SRH Hochschule Heidelberg**, Heidelberg (May 2016 to October 2018)

**Lecturer,**

Game Programming (October 2016 to December 2016, June 2017 to September 2017, April 2018 to October 2018)

- *C/C++*: Functional, procedural and object oriented programming (C++), introduction to programming as a concept, interaction between hardware and software
- *C#*: Programming patterns, JIT languages, algorithms
- *SFML, SDL*: Frameworks for visuals and audio (creating a game in C++)
- *MonoGame*: Framework for visuals and audio (creating a game as a team in C#)

**Tutor,**

Game Programming (May 2016 to July 2016, April 2017 to May 2017)

- *C/C++, C#*: Teaching and repeating topics from lectures, training for exams
- *XNA*: Support for the creation of a game

**Tutor,**

Game Engines and Scripting (January 2017 to February 2017)

- *Teaching*: Workflow of game engines, importers and common editors. Post effects and shader pipeline in game engines
- *Supervising*: Helping students debugging and solving problems in the engine. Help in decision making about workflows

**upjers GmbH**, Bamberg (April 2015 to September 2015)

**Game Design Internship,**

Game Development (Mobile)

- *Game Design*: Worked on the game design of *Color it up!* and *Glowing Darkness*, as well as some unreleased titles.
- *Level Design*: Worked on the level design of *Glowing Darkness* and was in a leading position for *Color it up!*.
- *Game Concepts/Game Design Documents*: Wrote concepts and documents for unreleased titles.
- *Tools Programming*: Wrote and/or extended the level editors for *Color it up!*, *Glowing Darkness* and unreleased titles.
- *Sound Design*: Worked on the sound design for *Glowing Darkness*.
- *Content Creation*: Created and validated content for *Color it up!*, *Glowing Darkness*, *upjers Quiz* and unreleased titles.

**Deck 13 Interactive**, Frankfurt am Main (June 2011 to July 2011)

**QA Internship (Student),**

Game Development (PC, Console)

- *Quality Assurance*: Stress testing the game *Tiger and Chicken*

## Education

**M.Sc. Applied Computer Science**, SRH Hochschule Heidelberg, Heidelberg (2016 - 2018)

**B.Sc. Virtual Reality - Game Development**, SRH Hochschule Heidelberg, Heidelberg (2013 - 2016)

**Abitur**, Hohe Landesschule, Hanau ( - 2013)

## Languages

- **German** - native speaker
- **English** - fluent

## Technical Experience

- **Programming Languages**: C/C++, C#, Java, ECMAScript (JavaScript), php, Lua
- **Game Engines and Frameworks**: Unreal Engine 5, Unity, Source SDK, XNA/MonoGame, .Net, SDL, SFML, Steam VR, Oculus VR, OpenGL
- **IDEs**: Visual Studio, Visual Studio Code, Visual Studio (Mac), Eclipse, NetBeans
- **Artistic Tools**: Blender, Maya, Photoshop, Illustrator, Gimp, InkScape, Paint.net, Audacity, Vegas Pro, SketchUp
- **Web Development**: HTML5, CSS3, jQuery, AngularJS
- **Databases**: SQL (MySQL), Azure Tables/Cosmos DB, Redis, MongoDB
- **Version Control**: git, SVN
- **EDP**: MS Office (Word, Excel, PowerPoint, OneNote, Access, Visio, Project), VBA, Open Office, Libre Office

## Shipped Titles

- **EMERGENCY** - Sixteen Tons Entertainment - PC 2023
- **DRAG** - GearEight Games - iOS/Android 2017
- **Color it up!** - Upjers GmbH - iOS/Android 2015
- **Glowing Darkness** - Upjers GmbH - iOS/Android 2015

## Student Projects

- **Game Loop** - Visual Scripting Tool for Unity with focus on card games - Master Thesis - 2018
- **Slartibartfast** - Texture generation tool for terrestrial planets - Bachelor Thesis - 2016
- **Fallout Board Game** - Writer, Artist, System Design - 2017
- **Far Cry Board Game** - Game Design, Level Design, System Design - 2015
- **Alone in the Dark** - Local Multiplayer Tower Defense in C#/XNA - Programming, System Design, Level Design - 2014
- **Digital Novel** - First C++ Project - 2014
- **Dozentopolis** - Primitive Flight Simulator for Oculus Rift - Artist, Programming - 2013

## **Scientific Work**

**Planning and development of a dedicated system for the creation of card games in the Unity Game Engine** - Master Thesis – 2018

**Generierung von Texturen für terrestrische Planeten** - Bachelor Thesis – 2016

**Modern Game Engine Architecture** - Analysis of the Unity Game Engine structure compared to the models proposed in Game Engine Architecture (Gregory, 2009) - Scientific Work – 2016