# VALENTIN GALEA

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## SUMMARY

Over 10 years of professional experience; PC, console and mobile development; Systems and rendering.

* advanced C++11/14/17; enthusiast level teacher and presenter
* 3D graphics concepts and algorithms, modern rendering techniques
* solid knowledge of *multithreaded* programming
* extensive experience with *Unreal Engine 4*
* taking pride in writing clean, maintainable and modular source code
* excellent social skills, enjoying pair programming and peer reviews

## WORK EXPERIENCE

### Open Source Author / 2015 – present

**github.com/valentingalea/shaderbox** – C++, GLSL, HLSL

* raytracing and raymarching library, signed distance fields modeling
* procedural terrain generation, volumetric effects, clouds rendering

### Senior Core-Tech Programmer - *Splash Damage* / January 2015 - present

* prepared and presented internal talk series *“C++11/14 for game development”*
* writer of monthly C++ newsletter

**Unannounced Title** – Xbox One, Windows 10

* implementing complete features (gameplay to rendering) <ongoing confidential development>

**Gears of War 4** – Windows 10

* involved with core tech and low-level systems
* implemented the PSO management for the DirectX 12 renderer

**Gears Of War Ultimate Edition** - Xbox One, Windows 10

* ported to the new UWP Microsoft platform
* VFX and Tech Art support: particle systems, editor enhancements
* implemented GPU rain and weather system
* ownership of the memory system of Unreal Engine 3: optimisations, tracking and custom tools

### Game Engine Developer - *Jagex* / December 2012 - December 2014

**Transformers Universe** - PC, 3D MOBA

* assisted development of low level infrastructure systems like: savegames, matchmaking, player groups, levelling and XP
* lend a helping hand the VFX department with a robust shader system
* R&D work for more graphical effects like parallax mapping

### Technical Director - *GAMbit Software* / January 2011 - September 2012

Small indie company that I co-founded with a friend.

### Senior Programmer - *Gameloft* / September 2009 - January 2011

**Tom Clancy's Splinter Cell** - iOS/Android, 3D action/stealth

* fixed pipeline OpenGL graphics features like fog effects, night and thermal vision
* implemented sniper rifles
* world editor enhancements

**N.O.V.A** - iOS/Android, FPS

* various gameplay fixes
* integrated an in-game proprietary online store

**Asphalt 5** - iOS, 3D racer

* the demo version of the game (stripped assets, prepared special build)

### Lead Programmer - *Newrosoft R&D* / July 2006 - November 2007

**Cheggers Party Quiz** - Nintendo DS

* learned the Nintendo specific SDK and prepared wrappers around it

**Shopping Dash, The Da Vinci Code, Bewitched** - PC, match-3, 2D casual strategy

* acting as team lead and worked on the gameplay, AI, map editor and scripting.
* responsible of converting it from OpenGL to DirectX.
* implemented the main match-3 mechanic, board fill algorithms

### Programmer - *Newrosoft R&D* / August 2004 - July 2006

unreleased **Age of Mourning** - MMO

* worked on various stages of the project
* ported proprietary engine to Torque 3D

**Tom Clancy's: Rainbow Six 3** - J2ME, 2D Action Shooter

* optimised framerate and player targeting system

### Programmer - Quake 3 Arena modding / 2002 – 2003

* new engine features like inventory and different powerups items.
* keeping in touch and planning with the other members of the team via IRC.