

# Tomáš Pastýřík

computer games programmer



## contact

Saskova 1481  
Kladno 27201  
Czech republic

+420 727 942 413

mail@tomaspastyrik.cz  
http://tomaspastyrik.cz

## languages

Czech - native  
English - fluent  
Norwegian - beginner  
Russian - intermediate

## programming

C++, C#, Python,  
CMAKE, QT,  
CUDA, OpenGL, GLSL,  
Javascript, Java,  
PHP - Nette,  
SQL - Doctrine2,  
CSS3 & HTML5,  
LaTeX

## platforms

PlayStation 4 devices,  
XBox One devices,  
Windows,  
Linux

## education

- 2014–2015 **Master's Studies** Czech Technical University, Prague  
**Ing.** in Open Informatics - Computer Graphics and Interaction
- Computer graphics and parallel programming on GPU specialization
  - Master's Thesis: *Visualization of inner structure of complex 3D objects based on opacity modulation*, [video link](#)
    - Novel method based on Illustration Buffer structure
    - GPU implementation, in-depth comparison of algorithms solving Order Independent Transparency
- winter 2013 **Erasmus Program** The University of Stavanger, Norsko  
Image Processing in Robot Vision  
Discrete Simulation and Performance Analysis  
Wireless Communications
- 2012–2013 **Master's Studies** Czech Technical University, Prague  
Open Informatics - Computer Graphics and Interaction
- 2009–2012 **Bachelor's Studies** Czech Technical University, Prague  
**Bc.** in Software technologies a management
- multimedia and web technologies specialization
  - Bachelor's Thesis: *Informational portal for quadriplegics* (in czech)
    - Collaboration with Okolo and Paraple center for the handicaps
    - User testing with paraplegics

## experience

- 2020-now **Senior Software Engineer** Hangar 13 (former 2K Czech)  
Working on unannounced projects
- 2019-2020 **Core and Platform Software Engineer** Hangar 13 (former 2K Czech)  
Engine I helped to develop was used for Mafia Definitive Edition (remake)
- 2018-2019 **Core and Platform Software Engineer** Hangar 13 (former 2K Czech)  
I was part of a small team responsible for the Borderlands: The Handsome Collection remaster
- 2017-2018 **Assistant Core and Platform Engineer** Hangar 13 (former 2K Czech)  
Mafia III development and work on announced projects  
Main interest in platform environments, content pipeline tools and packaging
- 2015-2016 **Junior Core and Platform Programmer** 2K Czech  
Mafia III development
- 2014-now **Mentor of Computer Games and Animation course** Czech Technical University  
Providing guidance and helping teams with the Game Design document, game prototype and a computer game based on Unity Engine.
- 2014 **Sound** for series of finale of a consumer events Mediarex Customer Promotions
- 2013 **Sound and Light Engineer - Folken** Stavanger, Norway  
Working as a sound and light engineer in a student organization driven club.

- 2011–2014 **OSVČ** - self-employed Czech republic  
Web technologies and presentations, front-end and back-end.  
Cooperation with *Magic Hole Creative Group*.
- 2009-2010 **Qbone studios** Praha Barrandov, Czech republic  
*IT Support*  
Support and installation in post-production studio during the *Saxána a Lexikon kouzel* movie process.

## ■ awards

- 2015 **Order Independent Transparency with Non-local Opacity Modulation for 3D Meshes, Central European Seminar on Computer Graphics 2015**  
Smolenice, Slovakia  
Best Paper Award, Best Presentation Award [link](#)
- 2012 **Computer Games and Animation** DCGI, Czech Technical University, Prague  
II. place for Space Arcade game, [video link](#)
- 2011 **SEMESTRÁLE VII Exposition** DCGI, Czech Technical University, Prague  
I. place in 3D animation category, [video link](#)

## ■ interests

**professional:** computer games development, shaders and parallel problem solutions, data visualization, web presentations programming, Nette Framework, linux, 3D modeling  
**personal:** mountaineering, cycling, music, guitar, band, cooking, computer games, theoretical physics, avionics and space science

## ■ publications

### articles

Order Independent Transparency with Non-local Opacity Modulation for 3D Meshes

*Awarded paper at Central European Seminar on Computer Graphics (CESCG), in proceedings., 2015*

### books

Život, sny a fantazie, Almanach studentů 2010

*published by Gymnázium J. A. Komenského v Novém Strašecí*