

# Tomáš Pastýřík

computer graphics programmer



## contact

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## languages

Czech - mother tongue  
English - fluent  
Norwegian - beginner  
Russian - intermediate

## programming

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

## 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

- 2015-now **Junior Core and Platform Programmer** 2K Czech  
Mafia III development
- 2014 **Mentor of Computer Games and Animation course** Czech Technical University  
Providing guidance and consulting teams during their semestral work consisting of 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  
Tomáš Pastýřík  
*currently reviewed paper at Central European Seminar on Computer Graphics (CESCG), 2015*

### books

Život, sny a fantazie, Almanach studentů 2010  
*published by Gymnázium J. A. Komenského v Novém Strašecí*