

# Cyril Höschl - CV



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LinkedIn: <http://cz.linkedin.com/in/cyrilhoshl>

- Software Developer
- Image processing
- Data Visualization
- 3D Graphics, HTML5, WebGL

## Education

- 2010 - onwards    PhD. - Faculty of Mathematics and Physics, Charles University Prague  
Computer Science, specialization in Digital Image Processing
- 2007 - 2010        MSc. - Faculty of Mathematics and Physics, Charles University Prague  
Computer Science, specialization in Computer Graphics
- 2002 - 2006        BSc. - Faculty of Mathematics and Physics, Charles University Prague  
Computer Science, specialization in Programming
- 2003 – 2005        Faculty of Informatics and Statistics - University of Economics, Prague (paused)
- 1996 - 2002        High School - Gymnasium of Jan Neruda, Prague

## Programming Languages and technology

- JavaScript
- HTML5
- WebGL + GLSL
- C/C++ (mostly C)
- Three.js, Node.js
- Mobile Web Apps (iOS)

- Visual Basic, VBA
- SQL
- MATLAB

## Human Languages

- English (upper-intermediate)
- Czech (native)
- German (very basic)

## Commercial Projects

- 2016 - onwards    TimelsLtd. s.r.o. – co-founder & CTO, Time management analyses in companies.
- 2009 – 2014        Author of Real-time Sociomapping®, made for company QED GROUP a.s. (current is the 3<sup>rd</sup> generation of the system, for quick preview see: [DEMO1](#) or [DEMO2](#) (best in Chrome).
- 2008 -              Team Profile Analyzer Software (see [ABOUT](#)) made for company Qed Group a.s.
- 2002 – 2007        Development of methods and software for Sociomapping® (3D visualization of complex statistical data) made for company Qed & Quod, see [sociomapping.com](http://sociomapping.com) (in C, Visual Basic, DirectX)
- 2003 -              Software for genetic research group, Dalhousie University, Halifax, Canada (two months stay in Halifax, Canada)
- 2002 (Jul-Sep)    Software for genetic research group, Dalhousie University, Halifax, Canada (two months stay in Halifax, Canada)
- 2002 -              Software for neuro cognitive studies for McMaster University, Canada (in C and Visual Basic)
- 2002 -              Interactive Digital Presentation for Rigips a.s. building company (in Flash and C/C++)
- 2001 -              3D Action game for company Jan Becher (in DirectX)
- 2000 -              2D Game “BecherMan” for company Jan Becher (in Visual Basic, DirectX)
- 1999 - onwards    Background research for [Czech Television](#) for the TV Show “Na Plovárně”.
- 1999 -              Rendered 3D animation of a cyber human for the realization of a new advertisement of perfume Ultra Violet by Paco Rabanne company (in Poser, 3DS MAX)
- 1999 -              Software for administration of abroad tours in companies (in ASP)
- 1998 -              Navigation software for cars using GPS (in C language – from scratch). Made for company 13 RM.
- 1997 -              Localization of programs CIDI LT and CIDI 12 into the Czech Authorized version for World Health Organization (in C++ language)

## **Research, International Conferences & Meetings**

- 2016 - Höschl Cyril, Flusser Jan: Decomposition of 3D Binary Objects into Rectangular Blocks , Digital Image Computing: Techniques and Applications (DICTA) 2016, DICTA 2016 : Digital Image Computing: Techniques and Applications, (Gold Coast, AU, 20161130) ([PDF here](#))
- 2016 - Höschl Cyril, Flusser Jan: Robust histogram-based image retrieval , Pattern Recognition Letters vol.69, 1 (2016), p. 72-81([PDF here](#))
- 2016 - Flusser Jan, Farokhi Sajad, Höschl Cyril, Suk Tomáš, Zitová Barbara, Pedone M.: Recognition of Images Degraded by Gaussian Blur , IEEE Transactions on Image Processing vol.25, 2 (2016), p. 790-806 ([PDF here](#))
- 2015 - Flusser Jan, Suk Tomáš, Farokhi Sajad, Höschl Cyril: Recognition of Images Degraded by Gaussian Blur, Computer Analysis of Images and Patterns - CAIP 2015, p. 88-99 , Eds: Azzopardi George, Petkov Nicolai, Computer Analysis of Images and Patterns, (Valletta, MT, 02.09.2015-04.09.2015) ([PDF here](#))
- 2014 - Höschl, Flusser: "Noise-Resistant Image Retrieval", 22nd International Conference on Pattern Recognition, 2014, Stockholm, Sweden, ([PDF here](#))
- 2013 - Höschl: "Accuracy of Sociomapping Visualization: Comparative Study with MDS and PCA", 2<sup>nd</sup> Symposium on Sociodiagnostics and Sociomapping, 2013, Baden Baden, Germany.
- 2012 - Suk, Höschl, Flusser: "Decomposition of Binary images - A Survey and Comparison", Pattern Recognition vol.45, 12 (2012), p. 4279-4291 [2012] (journal article) ([PDF here](#))
- 2012 - Suk, Höschl, Flusser: "Rectangular Decomposition of Binary Images", Advanced Concepts for Intelligent Vision Systems, 2012, Brno, Czech Republic.
- 2012 - Höschl: "Visualization of Team Profiles with the Use of Indirect Sociomaps", International Institute for Advanced Studies in Systems Research and Cybernetics - Symposium on Sociodiagnostics and Sociomapping, 2012, Baden Baden, Germany.
- 2012 - Höschl, Bahbouh: "Indirect Sociomapping", 25th European Conference on Operational Research, 2012, Vilnius, Lithuania.
- 2012 - Suk, Höschl, Flusser: „A Comparison and Survey of Binary Images Decomposition“, Week of Doctoral Students, Prague
- 2011 - Rozehnalová, Höschl, Bahbouh: "Team Sociomapping - A Teamwork Visualization Tool", 5th Annual International Conference on Psychology, 2011, Athens, Greece.
- 2011 - Sýkora, Höschl, Rozehnalová, Koten: "Analyzing Mutual Relationships in Military Units Operating in Foreign Missions", 47th International Applied Military Psychology Symposium, 2011, Vienna, Austria.
- 2010 - Höschl, Jenček: "MotionMap - Understand Dynamics of Your Site", WebExpo conference, 2010, Prague, Czech Republic
- 2009 - Jenček, Vojtáš, Kopecký, Höschl: "Sociomapping in Text Retrieval Systems", 8th International Conference in Flexible Query Answering Systems, 2009, Roskilde, Denmark
- 2008 - Sýkora, Srb, Bahbouh, Höschl: "Building Successful Teams Based on Psychological Profiles Analysis", 50th Conference of International Military Training Association, 2008, Amsterdam, Netherlands
- 2008 - Höschl: "3D visualization of team dynamics by animated Sociomaps.", 29th International Congress of Psychology, 2008, Berlin, Germany.
- 2007- Srb, Bahbouh, Osuský, Höschl: "Sociomapping as a team development tool.", 10th European congress of psychology, 2007, Prague, Czech Republic
- 2007- Höschl: "Vizualization of team dynamics with Sociomapping analysis", International Sunbelt Social Network Conference, Sunbelt XXVII, 2007, Corfu, Greece.
- 2005- Sýkora, Bahbouh, Bernardová, Höschl: "The Use of Sociomapping in the Area of Mental Health", 8th International Military Mental Health Conference, 2005, Prague, Czech Republic
- 2005- Sýkora, Bahbouh, Höschl, Janošec: "Supporting Military Transformation with Sociomapping Analysis - a Software Tool". IMTA (International Military Testing Association), 47th Conference, 2005, Singapore

## **Awards**

- 2012- Innovation Award given by The International Institute for Advanced Studies in Systems Research and Cybernetics, Canada. Given in Baden-Baden, Germany.
- 2001- Participation in the Expo Science 2001 exhibition in Brussels, Belgium (as an award in the final stage of competition AMAVET).
- 2001- Participation in the competition of High School projects AMAVET with the program CHMorpher and advancing to the final stage in Prague
- 2000- 2<sup>nd</sup> Prize for BecherMan in the Becherovka Game competition launched by Jan Becher company.
- 2000 - High School-Prize from Educated Society of Czech republic for special activity in physics and mathematics
- 1999 - 2<sup>nd</sup> Prize in the final stage of International Competition in Programming - ICP '99, Brno, Invex Computer, Czech republic
- 1999 - Advancing to the final stage of International Competition in Programming, ICP '99
- 1997 – 1998 Successful solver, Olympiad of Physics, Mathematics and Informatics, Prague
- 1997 - 3<sup>rd</sup> Prize in programming competition for Children and Youth, Prague