

CONTACT INFORMATION	Vazovova 3228 143 00, Praha 12 Czech Republic	phone: +420 723 242 516 e-mail: benes@cgg.mff.cuni.cz http://janbenes.net , LinkedIN
MAJOR PROJECTS	Spectral Acquisition Pipeline (2013–2014) , supervised by <i>Todd Harvey</i> and <i>Richard Prum</i> , Yale Univ. <ul style="list-style-type: none">• Development, design, and documentation of a software pipeline for spectral acquisition of bird skins• Interfacing hardware (cameras and filter-wheels using COM/ASCOM, Standa mechanical iris, Shape-Grabber 3D scanner, IP power switch, IBM Turntable)• Scriptable acquisition runs, data processing (white balancing, convolving spectral data into avian/human colours), integration with pre-existing parts of the pipeline (HDR combining, 3D reconstruction)• C++, MATLAB, OpenEXR, COM/ASCOM, JSON, XML Birdviewer (2013–ongoing) , supervised by <i>Todd Harvey</i> and <i>Richard Prum</i> , Yale University <ul style="list-style-type: none">• Visualization of tetra-chromatic avian data• Co-designed and implemented novel methods for visualization of tetra-chromatic (avian) color• Java, JOGL/OpenGL/GLSL City Modelling (2009–2013) , Experimental street layout modelling software <ul style="list-style-type: none">• Proposed and implemented a novel method for procedural modelling of cities• C#, CUDA for C, C++/CLI, OpenTK/OpenGL Flying Samurai (2009–2010) , World War 1 aerial combat simulator, Team Project <ul style="list-style-type: none">• Supervised by Otakar Nieder (Bohemia Interactive Simulations)• Team-leader, one of two game designers, programmer• Team of 4 programmers and several externs• Developed over the course of approximately 15 months from specification to hand-in• Defended with extra credit, featured at university recruitment website• C++, Ogre3D, Bullet, OpenSteer, multi-threaded core Soccer (2007–2008) , an interactive soccer match simulation <ul style="list-style-type: none">• Designer, programmer, 2D artist• Advanced artificial intelligence, good game-play• C++	
WORK EXPERIENCE	Intern , ESRI R&D Center Zürich (7/2014–11/2014, ongoing, 5 months) <ul style="list-style-type: none">• Research related to Procedural Modelling Techniques Student Software Engineer , Ricardo Prague (3/2012–3/2013, 1 year) <ul style="list-style-type: none">• Migration of several projects to CMake• Maintenance of C++ code base• Regression testing and manual use case testing	
EDUCATION	Charles University in Prague <ul style="list-style-type: none">• Ph.D. (2011–ongoing, expected 2015), Computer Graphics• Master of Science (2008–2011) equivalent, Computer Science• Bachelor of Science (2005–2008) equivalent, Computer Science Yale University , Visiting Assistant in Research at Lab of Ornithology (3/2012–12/2013, 9 months) Vienna University of Technology , ERASMUS exchange student (9/2009–1/10, 4.5 months)	
SELECTED COURSEWORK	Math Discrete Mathematics, Linear Algebra I & II, Mathematical Analysis I, II, & III, Combinatorics and Graphs I, Probability and Statistics, Probabilistic Methods Computer Science Algorithms and Data Structures I & II, Data Structures I, Database Systems, Non-Procedural Programming, Object Oriented Programming, Automata and Grammars, Design Patterns, Recommended Programming Practices (Code Complete), Introduction to Complexity and Computability Theory. <i>Full List upon Request.</i>	
SKILLS	Advanced Proficiency C++, C#, Intermediate Proficiency Mercurial, SVN, CUDA, Java, OpenGL/GLSL Elementary Proficiency SQL, Bash, Python, CMake, COM	
MISC	Student Volunteer , ACM SIGGRAPH 2012, Los Angeles	
LANGUAGES	English (fluent), German (advanced), French (beginner), Czech (native)	
REFERENCES	Todd A. Harvey , Yale University, todd.harvey@yale.edu , phone number upon request Jaroslav Krivánek , Charles University in Prague, jaroslav.krivanek@mff.cuni.cz , +420 221 914 214 Bernard Lidický , University of Illinois at Urbana-Champaign, lidicky@illinois.edu , (217) 244-1493 Otakar Nieder , BI Simulations, otakar.nieder@bisimulations.com , phone number upon request	