

Andy Chow

Curriculum Vitae

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Department of Computer Science
University of Toronto
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Research Interests

Realistic image synthesis, computational photography, medical imaging, character animation, human-computer interaction (HCI), non-photorealistic rendering (NPR), computer vision, and machine learning.

Education

Ph.D. ABD, Computer Science University of Toronto Supervisor: Eugene Fiume	2016
M.Sc., Computer Science University of Toronto Thesis: Orthogonal and Symmetric Haar Wavelets on the Three-Dimensional Ball. Supervisor: Eugene Fiume	2010
H.B.Sc., Computer Science University of Toronto Graduated with distinction.	2007

Experience

Research Software Developer Simon Fraser University / University of Toronto. <ul style="list-style-type: none">Developed a ceramic database search engine using machine learning.Collaborated with archaeologists and other non-technical stakeholders.	2017 – 2021
Course Instructor University of Toronto. <ul style="list-style-type: none">Head instructor for <i>Introduction to Databases</i>.Taught SQL and relational schema design to third-year students.	2013 – 2015
Teaching Assistant University of Toronto. <ul style="list-style-type: none">Taught courses listed in the <i>Teaching Assistantships</i> section.	2009 – 2017
Student Researcher University of Toronto. <ul style="list-style-type: none">Developed a real-time 3D volume renderer for biophysicists.	2004 – 2006
Software Developer Freelancer and independent contractor.	2000 – 2009

Course Instructorships	<ul style="list-style-type: none"> • Introduction to Databases 	2013 – 2015
Teaching Assistantships	<ul style="list-style-type: none"> • Introduction to Databases • Software Tools and Systems Programming • Introduction to Artificial Intelligence • Computer Forensics • Introduction to Information Security • Designing a Website for Historical Studies • The Why and How of Computing • Computer Science for High School • Programming on the Web • Introduction to the Theory of Computation • Introduction to Computer Programming • Capstone Design Course 	2010 – 2013, 2015 – 2017 2011 – 2017 2015 2013 – 2014 2009 – 2010, 2013 – 2014 2011 – 2013 2009 – 2013 2012 2010 2009 – 2010 2009 – 2010 2009 – 2010
Awards and Honors	<ul style="list-style-type: none"> • Ontario Graduate Scholarship (OGS) • Mary H. Beatty Fellowship • Helen Sawyer Hogg Graduate Admission Award • Ontario Scholar Award 	2007 – 2009 2007 2007 1999
Graduate Courses	<ul style="list-style-type: none"> • Computer Graphics (CSC2504) • Introduction to Machine Learning (CSC2515) • Computer Vision for Advanced Digital Photography (CSC2530) • Advanced Image Synthesis (CSC2522) • Non-Photorealistic Rendering (CSC2521) • Physics-Based Character Animation (CSC2521) • Character Animation (CSC2529) • Sketching: Interaction, Modeling and Perception (CSC2521) • Computational Structural Biology (CSC2418) 	
Technical Skills	Programming: C, C++, Java, JavaScript, Python, SQL Database: JDBC, MongoDB, MySQL, PostgreSQL Web: CSS, HTML, JavaScript, Perl, PHP Graphics: Adobe Photoshop, Autodesk Maya, OpenGL, PBRT, POV-Ray Academic: Maple, Mathematica, MATLAB, ML, Octave, Prolog, Scheme	
Conference Presentations	"The CRANE Ceramics Project: The Challenges of Automated Sherd Matching", <i>ASOR Annual Meeting</i> , Boston MA, Nov 2017.	