Chenxi Liu

**** 778-682-4112 ② liuchenxi0921@gmail.com % https://chenxil21.github.io/ in Linkedin chenxi-liu-05b14280

Education

University of British Columbia

Ph.D. in Computer Science

Advised by Professor Alla Sheffer

Carnegie Mellon University

M.S. in Computer Science

Aug 2013 – Dec 2014 Pittsburgh PA, USA

• GPA: 3.85/4.0

Beihang University

B.Eng. in Computer Science and Technology

Aug 2013 - Dec 2014 P Beijing, China

- GPA: 3.83/4.0
- Ranking: 2/188

Skills

Programming

C/C++ • Python • MATLAB • Java

Libraries and Tools

libigl • CGAL • PyTorch • scikit-learn CUDA • OpenCL • OpenGL

CMake • Git • Shell • ŁTĘX

Visual Editing

Illustrator • Photoshop • Premiere

Languages

Chinese (Native speaker) • English (Fluent) • Japanese (Conversational)

Honors_

WiGRAPH Rising Stars

ACM Community Group for Women in Computer Graphics Research

Technology Award Winner: Threadsteading

IndieCade'16

National Scholarship

Beihang University

Awarded to top 1% students in academic performance.

The First Prize Scholarship of **Academic Performance**

Beihang University Awarded for 2010, 2011, 2012.

Objective

Postdoctoral researcher with a Ph.D. in 2D/3D geometries, emphasizing line drawing processing, vector graphics, and non-photorealistic rendering. Currently expanding expertise in image generation. Eager to advance my skills in a research role, contributing to innovative 2D/3D geometry and vector graphics solutions.

Research and Professional Experience

Postdoctoral Researcher

DGP Lab, University of Toronto

July 2023 - Present

♀ Toronto ON, Canada

- Collaborating with Professor Alec Jacobson on vector graphics
- Mentoring two undergrads; collaborating with two Ph.D. students

Research Assistant

Digital Geometry Processing Group, UBC

Sep 2016 – Jun 2023

♀ Vancouver BC, Canada

- Researched processing vector sketches (2D geometry processing)
- Assisted a patent agent for an application
- Resulted in five top-tier papers and one patent application

Research Intern

Adobe Research

May 2020 - Nov 2020

Remote

- Conducted research on non-photorealistic line drawing generation
- Resulted in a patent application and a top-tier journal publication

March 2023 – June 2023

♀ Toronto ON, Canada

• Conducted research on text-to-image generation

Research Associate

Disney Research Pittsburgh

Mar 2015 – Jul 2016

Pittsburgh PA, USA

- Researched guilting pattern generation for CNC guilting machine
- Resulted in a conference paper and an award-winning game

Intern, Software Development Engineer in Test

Microsoft Search Technology Center Asia

₩ Jul 2012 – Sep 2012

♀ Beijing, China

• Developed scripts for search data analysis, identifying a bug during internship

Leadership Experience

Guest Lecturer at UofT

∰ 2023

• Led a lecture and coordinated a text-to-image generation assignment for 110 undergrads, under LEAF+ funding

Student Representative at UBC

- Served on Graduate Student Recruiting Committee
- Conducted initial screening of applicant materials

Teaching Assistant at UBC

Parallel Computation, Winter 2 2016; Video Game Programming, Winter 2 2018;

Geometric Modeling, Winter 1 2022

Selected Publications (2 out of 9) _

- Chenxi Liu, Toshiki Aoki, Mikhail Bessmeltsev, Alla Sheffer. "StripMaker: Perception-driven Learned Vector Sketch Consolidation". ACM ToG, 2023.
- Chenxi Liu, Pierre Bénard, Aaron Hertzmann, Shayan Hoshyari. "ConTesse: Accurate Occluding Contours for Subdivision Surfaces". ACM ToG, 2022. US Patent App. 17/466,670.