

Honglin Chen

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Education

May 2026 (Expected) Sep 2021-	PhD in Computer Science Columbia University , New York, United States <i>Advisor: Changxi Zheng</i>
Sep 2019-Jan 2021	MSc in Computer Science University of Toronto , Toronto, Canada <i>Advisor: David I.W. Levin</i>
Sep 2015-Jun 2019	B.Eng. in Computer Science and Technology Zhejiang University , Hangzhou, China GPA: 3.89/4.0

Publication

- Honglin Chen**, Hsueh-Ti Derek Liu, Alec Jacobson, David I.W. Levin, Changxi Zheng.
Trust-Region Eigenvalue Filtering for Projected Newton.
SIGGRAPH Asia 2024 (Conference Track)
- Honglin Chen**, Hsueh-Ti Derek Liu, David I.W. Levin, Changxi Zheng, Alec Jacobson.
Stabler Neo-Hookean Simulation: Absolute Eigenvalue Filtering for Projected Newton.
SIGGRAPH 2024 (Conference Track)
- Honglin Chen***, Rundi Wu*, Eitan Grinspun, Changxi Zheng, Peter Yichen Chen.
Implicit Neural Spatial Representations for Time-dependent PDEs.
ICML 2023
- Honglin Chen**, Changxi Zheng, Kevin Wampler.
Local Deformation for Interactive Shape Editing.
SIGGRAPH 2023 (Conference Track)
- Ty Trusty, **Honglin Chen**, David I.W. Levin.
The Shape Matching Element Method: Direct Animation of Curved Surface Models.
ACM Transactions on Graphics (SIGGRAPH), 2021.
- Honglin Chen**, Hsueh-Ti Derek Liu, Alec Jacobson, David I.W. Levin.
Chordal Decomposition for Spectral Coarsening.
ACM Transactions on Graphics (SIGGRAPH Asia), 2020.

Honors and Scholarships

WiGRAPH Rising Stars in Computer Graphics	2024
University of Toronto Tuition Fellowship	2019-2021
First Class Academic Scholarship(Top 5% in Academic Performance)	2016
Distinctive Student Awards	2016
Scholarship of the Government of Zhejiang Province	2016
Scholarship of Arts and Athletics	2016, 2017

Work Experience

Jun 2024- Aug 2024	Meta Reality Lab Research Intern - Mentor: <i>Tuur Stuyck</i>
Jun 2023- Aug 2023	Adobe Research Research Intern - Mentor: <i>Alec Jacobson</i>
Jun 2022- Aug 2022	Adobe Research Research Intern - Mentor: <i>Kevin Wampler</i>
Feb 2021- May 2021	NVIDIA Research Research Intern - Mentor: <i>Sanja Fidler</i>
Nov 2018-May 2019	Microsoft Research Asia Research Intern - Mentor: <i>Yizhong Zhang</i>

Academic Services

Reviewers for SIGGRAPH, SIGGRAPH Asia, Eurographics.

Invited Talks

1. Symposium on Computer Animation, Invited Course
Introduction to Optimization for Simulation. Aug 2024
2. AI4Science Talks
Neural Fields for PDEs. Mar 2023
3. Toronto Geometry Colloquium
Chordal Decomposition for Spectral Coarsening. Nov 2020

Teaching

- **Guest Lecturer, Columbia University:**
COMS4167 Computer Animation Instructor: *Changxi Zheng* Spring 2024
- **Substitute Lecturer, University of Toronto:**
CSC2521 Seminar in Geometry and Animation Instructor: *Alec Jacobson* Fall 2020
- **Teaching Assistant**
 - **Columbia University:**
COMS4167 Computer Animation Instructor: *Changxi Zheng* Spring 2024
COMS4732 Computer Vision II: Learning Instructor: *Carl Vondrick* Spring 2023
 - **University of Toronto:**
CSC2521 Seminar in Geometry and Animation Instructor: *Alec Jacobson* Fall 2020
CSC2549/417 Physics Based Animation Instructor: *David I.W. Levin* Fall 2020
CSC2504/418 Computer Graphics Instructor: *Sarah Kushner* Summer 2020
CSC2504/418 Computer Graphics Instructor: *David I.W. Levin* Winter 2020

Community Services

1. Summer Geometry Initiative, *Mentor* 2023
2. Columbia CS PhD Pre-Submission Application Review Program, *Reviewer* 2022, 2023