Yue Li

EMail *yueli.cg@gmail.com*
Webpage *https://liyuesolo.github.io/*
Google Scholar ID *bBcDQlsAAAAJ*

Education

- **ETH Zurich** — Zurich, Switzerland
  Ph.D. in Computer Science — *Sep. 2020 - Dec. 2025 (expected)*

- **University of Pennsylvania** — Philadelphia, USA
  M.S.E in Computer Graphics and Game Technology; GPA: 3.9/4.0 — *Aug. 2018 - Dec. 2019*
  Thesis: Hybrid Lagrangian-Eulerian Topology Optimization

- **Beijing University of Technology** — Beijing, China
  B.S.E in Software Engineering; GPA: 3.8/4.0 (Ranking 1/62) — *Sep. 2014 – Jun. 2018*

Publications

Fabian Haller, **Yue Li**, Stelian Coros, and Bernhard Thomaszewski. Graph Neural Networks with Directional Encodings for Anisotropic Elasticity *In submission* (2023).

Yue Li, Stelian Coros, and Bernhard Thomaszewski. Neural metamaterial networks for nonlinear material design. ACM Transactions on Graphics (TOG) 42, no. 6 (2023).

Yinwei Du, **Yue Li**, Stelian Coros, and Bernhard Thomaszewski. No free slide: Spurious contact forces in incremental potential contact. arXiv preprint arXiv:2308.01696, 2023.

Yue Li, Juan Montes, Bernhard Thomaszewski, and Stelian Coros. Programmable Digital Weaves. IEEE Robotics and Automation Letters, 2022.

Jonas Zehnder, **Yue Li**, Stelian Coros, and Bernhard Thomaszewski. NTopo: Mesh-free Topology Optimization using Implicit Neural Representations. Advances in Neural Information Processing Systems, 34, 2021.

Yue Li, Marc Habermann, Bernhard Thomaszewski, Stelian Coros, Thabo Beeler, and Christian Theobalt. Deep Physics-aware Inference of Cloth Deformation for Monocular Human Performance Capture. In 2021 International Conference on 3D Vision (3DV) (pp. 373-384). IEEE.

Yue Li*, Xuan Li*, Minchen Li*, Yixin Zhu, Bo Zhu, and Chenfanfu Jiang. Lagrangian–Eulerian multidensity topology optimization with the material point method. Int J Numer Methods Eng. 2021; 1– 25. (* joint first authors)

Llogari Casas, **Yue Li**, and Kenny Mitchell. "FaceMagic: Real-time Facial Detail Effects on Mobile." In SIGGRAPH Asia 2020 Technical Communications, pp. 1-4. 2020.

Yue Li, Liqian Ma, Haoqiang Fan, and Kenny Mitchell. "Feature-preserving detailed 3d face reconstruction from a single image." In Proceedings of the 15th ACM SIGGRAPH European Conference on Visual Media Production, pp. 1-9. 2018. **(Best Paper Award)**

Yue Li, Pablo Wiedemann, and Kenny Mitchell. "Deep Precomputed Radiance Transfer for Deformable Objects." Proceedings of the ACM on Computer Graphics and Interactive Techniques 2, no. 1 (2019): 1-16.

Yanlong Tang, Xiaoguang Han, **Yue Li**, Liqian Ma, and Ruofeng Tong. "Expressive facial style transfer for personalized memes mimic." The Visual Computer 35, no. 6 (2019): 783-795.

Patents

Kenny Mitchell, Llogari Casas, and **Yue Li**, "Real-time feature preserving rendering of visual effects on an image of a face", US11288859B2.

Research Experience

- **Max Planck Institute for Informatics** — Saarbruecken, Germany
  Visiting Scholar, Advisor: Prof. Christian Theobalt and Dr. Thabo Beeler — *Mar. 2020 - Aug. 2020*
- **Disney Research** — Glendale, U.S.A.
  Research Intern, Advisor: Prof. Kenny Mitchell — *May. 2019 - Aug. 2019*
- **Edinburgh Napier University** — Remote
  Research Intern, Advisor: Prof. Kenny Mitchell — *Jun. 2018 - Sep. 2018*
- **Megvii Inc.(Face++)** — Beijing, China
  Research Intern, Leader: Dr. Liqian Ma, Mr. Haoqiang Fan — *Jul. 2017 - May 2018*
- **Tsinghua University** — Beijing, China
  Research Assistant — *Nov. 2016 - Apr. 2017*

Teaching Experience

- **CIS563 Physics-based Animation** UPenn Fall 2019 Teaching Assistant
- **Visual Computing** ETH Zurich Fall 2020, 2021, 2022 Teaching Assistant
- **Computational Models of Motion** ETH Zurich Spring 2021, 2022 Teaching Assistant
- **Physically-Based Simulation in Computer Graphics** ETH Zurich Fall, 2022 Teaching Assistant

Academic Service

- **Reviewer** SIGGRAPH, SIGGRAPH Asia, Symposium on Computational Fabrication, Eurographics

Student Supervision

- **Master Thesis at ETH**
  Mr. Logan Numeral, thesis: Implicit Foam Modelling Using Generalized Voronoi Diagrams.
  Mr. Christoph Amveror, thesis: A Differentiable Model of Cell Intercalation.
  Mr. Fabian Haller, thesis: Graph Neural Networks with Directional Encodings for Anisotropic Elasticity.

Programming Skills

- **Languages**: C++, Python, Julia, Matlab