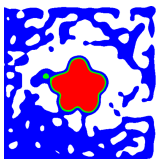
Michael Xu



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Education

Simon Fraser University — May 2023 — Present
PhD in Computing Science

University of Toronto — Sep 2015 — Apr 2020
B.A.Sc. in Engineering Science, Electrical and Computer Engineering Option

Publications

- **Michael Xu**, Yi Shi, KangKang Yin, Xue Bin Peng. PARC: Physics-based Augmentation with Reinforcement Learning for Character Controllers. *Conditionally accepted to SIGGRAPH*, (2025)
- **Michael Xu***, Changyong Song*, David I. W. Levin, David Hyde. A Differentiable Material Point Method Framework for Shape Morphing. *Under review*, (2025)

Work Experience

- **Software Developer**, *Rocscience Inc.* — May 2020 — Jan 2023
- **Software Developer Intern**, *Rocscience Inc.* — May 2019 — Aug 2019
- **Software Engineering Intern**, *Microsemi Corporation* — Jul 2018 — Apr 2019
- **Summer Research Student**, *UofT Dynamic Graphics Project* — May 2017 — Aug 2017
- **Technical Student**, *Toronto Hydro* — May 2016 — Aug 2016

Posters

- **Michael Xu***, Changyong Song*, David I. W. Levin, David Hyde. A Differentiable Material Point Method Framework for Shape Morphing. *Symposium of Computer Animation*, (2024)
  Best Poster Award
- **Michael Xu**, David I. W. Levin. Deformation Gradient Control of Physically Simulated Elastoplastic Amorphous Objects. *Symposium of Computer Animation*, (2023)

Awards

- Best Poster Award - Symposium of Computer Animation 2024 — 2024
- 3rd at Ontario Engineering Competition - Programming — 2018
- 1st at UofT Engineering Kompetition (UTEK) - Programming — 2018
- 2nd at WearHacks Toronto Hackathon — 2016
- 3rd at UofT Game-Making Deathmatch — 2016
- Vale Higher Education Scholarship — 2015
- UofT President's Entrance Scholarship — 2015

Software Skills

- Primary language and experience with very large projects: Python, C++
- Experience with large projects: GLSL, MATLAB, LaTeX
- Experience with small projects: C, C#, VBA, Tcl, Perl, Verilog, HTML, CSS
- Libraries: PyTorch, Numpy, ImGui, Polyscope, Eigen, OpenGL
- Software: Visual Studio, Unity, Blender
- Tools: Git, ffmpeg