Kyle Genova

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EDUCATION

Sept. 2016 - Present **Princeton University** Princeton, NJ

- **Ph.D. and M.A. Computer Science**
- **Advisor: Prof. Thomas Funkhouser**
- **NSF GRFP Fellowship**
- **Gordon Y.S. Wu Fellowship in Engineering**

Aug. 2012 - May 2016 **Cornell University College of Arts and Sciences** Ithaca, NY

- **B.A. Computer Science**
- **GPA: 4.17**
- **Phi Beta Kappa (Top 3% of class)**
- **CRA Outstanding Undergraduate Researcher Nomination**

PUBLICATIONS

Rasterize-then-Splat: Simple Differentiable Rendering. Forrester Cole, Kyle Genova, Daniel Vlasic. Under Review.

Local Deep Implicit Functions for 3D Shape. Kyle Genova, Forrester Cole, Avneesh Sud, Aaron Sarna, Thomas Funkhouser. CVPR 2020 ***(Oral)***.

CvxNet: Learnable Convex Decomposition. Boyang Deng, Kyle Genova, Soroosh Yazdani, Sofien Bouaziz, Geoffrey Hinton, Andrea Tagliasacchi. CVPR 2020 ***(Best Paper Nominee)***.

Towards Fairness in Visual Recognition: Effective Strategies for Bias Mitigation. Zeyu Wang, Klint Qinami, Ioannis Christos Karakozis, Kyle Genova, Prem Nair, Kenji Hata, Olga Russakovsky. CVPR 2020.

Learning Shape Templates with Structured Implicit Functions. Kyle Genova, Forrester Cole, Daniel Vlasic, Aaron Sarna, William T. Freeman, Thomas Funkhouser. ICCV 2019.

Text-based Editing of Talking-head Video. Ohad Fried, Ayush Tewari, Michael Zollhöfer, Adam Finkelstein, Eli Schechtman, Dan B. Goldman, Kyle Genova, Zeyu Jin, Christian Theobalt, Maneesh Agrawala. SIGGRAPH 2019.

Unsupervised Training for 3D Morphable Model Regression. Kyle Genova, Forrester Cole, Aaron Maschinot, Aaron Sarna, Daniel Vlasic, William T. Freeman. CVPR 2018 ***(Spotlight)***.

Learning Where to Look: Data-Driven Viewpoint Set Selection for 3D Scenes. Kyle Genova, Manolis Savva, Angel X. Chang, Thomas Funkhouser. CoRR 2017.

An Experimental Evaluation of the Best-of-Many Christofides' Algorithm for the Traveling Salesman Problem. Kyle Genova & David P. Williamson. Algorithmica 2017 ***(Selected Publication)***, ESA 2015.

EXPERIENCE

Sept. 2019 - Present **Research Intern at Google** Mountain View, CA

- Project: "Learned Implicit Functions and Differentiable Rendering"
- ***Patent Filing by Google (x2)***

Sept. 2018 - Sept. 2019 **Engineering Consultant at AutoRoboto** Mountain View, CA

- Full-time consultant to Google in Machine Perception

June 2018 - Sept. 2018 **Research Intern at Google** Cambridge, MA

- Project: “Learning Shape Templates with Structured Implicit Functions”

Sept. 2017 - May. 2018 **Teaching Assistant at Princeton University** Princeton, NJ

- Computer Vision (COS 429), Computer Graphics (COS 426)
- ***Graduate Student Teaching Award***

June 2017 - Sept. 2017 **Research Intern at Google** Cambridge, MA

- Project: “3D Face Models from Facial Identity Features”
- ***Patent Filing by Google***

June 2016 - Aug. 2016 **Research Intern at Google** New York, NY

- Project: “In-Memory K-Way Balanced Graph Partitioning”

SKILLS

- C++, Python, TensorFlow, PyTorch, CUDA, OpenGL, GLSL