Arman Maesumi · arman_maesumi@brown.edu · armanmaesumi.github.io

EDUCATION

Brown University Sept '21 - Present
Doctor of Philosophy, Computer Science GPA: 4.00
Advisor: Professor Daniel Ritchie

The University of Texas at Austin Aug '18 - Aug '21
Bachelor of Science, Computer Science

EXPERIENCE

Adobe Research - San Francisco, CA May '23 - Dec '23
Research Scientist Intern, Mentors: Noam Aigerman, Thibault Groueix, Vova Kim
Published PoissonNet, a neural network architecture for learning on surfaces.

Adobe Research - Remote May '22 - Dec '22
Research Scientist Intern, Mentors: Sören Pirk, Matt Fisher, Vova Kim
Published OneNoise, a generative model that interpolates between procedural noises.

Brown University Sept '21 - Present
Research Assistant, Advisor: Prof. Daniel Ritchie

UT Austin · Computational Visualization Center (CVC) Aug '20 - Dec '20
Undergraduate Researcher, Advisor: Prof. Chandrajit Bajaj
Synthesized adversarial textures that robustly cloak humans from object detectors.

UT Austin · Department of Computer Science May '19 - June '20
Undergraduate Researcher, Advisor: Prof. Chandrajit Bajaj
Trained neural network to evaluate chess positions, and created the largest public dataset of labeled chess positions (at the time).

UT San Antonio · Department of Mathematics Aug '17 - May '18
Undergraduate Researcher, Advisor: Prof. Cody Patterson
Derived the probability density function and moments of the area of stochastically generated inscribed triangles.

PUBLICATIONS

PoissonNet: A Local-Global Approach for Learning on Surfaces. **Arman Maesumi**, Tanish Makadia, Thibault Groueix, Vladimir G. Kim, Daniel Ritchie, Noam Aigerman. *ACM Transactions on Graphics (Proceedings of SIGGRAPH Asia) 2025*.

One Noise to Rule Them All: Learning a Unified Model of Spatially-Varying Noise Patterns. **Arman Maesumi**, Dylan Hu, Krishi Saripalli, Vladimir G. Kim, Matthew Fisher, Sören Pirk, Daniel Ritchie. *ACM Transactions on Graphics (Proceedings of SIGGRAPH) 2024*.

Explorable Mesh Deformation Subspaces from Unstructured 3D Generative Models. **Arman Maesumi**, Paul Guerrero, Vladimir G. Kim, Matthew Fisher, Siddhartha Chaudhuri, Noam Aigerman, Daniel Ritchie. *SIGGRAPH Asia 2023*.

Triangle Inscribed-Triangle Picking. **Arman Maesumi**. *The College Mathematics Journal*, 50:5, 364-371, 2019.

HONORS & AWARDS

NSF Graduate Research Fellowship (GRFP) **2022**

MD5 Hackathon: 1st Place Entry 2017
Awarded $15,000 grant from Department of Defense

SERVICE

Reviewing
Eurographics 2025
SIGGRAPH Asia 2024, 2025
TVCG 2024
ICCV 2023

Departmental Service
Brown Visual Computing Seminar co-organizer 2023 - Present
Brown PhD Admissions 2025
NSF Research Experiences for Undergraduates Program (REU) mentor 2024, 2025

Mentorship
Aruna Anderson Visiting Undergraduate (NSF REU) 2025
Nicole Ge Visiting Undergraduate (NSF REU) 2025
Krishi Saripalli Brown CS Undergraduate 2024

SOFTWARE

Panopti: Interactive 3D Visualization in Python
`pip install panopti`
https://github.com/ArmanMaesumi/panopti

TorchRBF: GPU-Accelerated Radial Basis Function Interpolator
`pip install torchrbf`
https://github.com/ArmanMaesumi/torchrbf

SKILLS

Programming Languages
Python, C/C++, CUDA, JavaScript, Go, Java

Tools & Technologies
PyTorch, PyTorch C++/CUDA API, NumPy, LaTeX, LibIGL, Linux, Pybind11, Flask, SocketIO, React, ThreeJS

Miscellaneous
Blender, Adobe Ps/Ai/Ae, Cinema 4D, Octane Render, OpenGL, ComfyUI

PERSONAL

3D Art Portfolio
https://www.behance.net/armanmaesumi

HumanBenchmark Verbal Memory
735pts (>99.5 percentile)

Rubik's Cube Personal Record
11.25 seconds