# ARMAN MAESUMI.arman\_maesumi@brown.edu.armanmaesumi.github.io

### **EDUCATION**

### **Brown University**

Sept '21 - Present

Doctor of Philosophy, Computer Science

Advisor: Professor Daniel Ritchie

GPA: 4.00

# The University of Texas at Austin

Aug '18 - Aug '21

Bachelor of Science, Computer Science

### **EXPERIENCE**

### Adobe Research - San Francisco, CA

May '23 - Present

Research Scientist Intern, Mentors: Noam Aigerman, Thibault Groueix, Vova Kim

### Adobe Research - Remote

May '22 - Dec '22

Research Scientist Intern, Mentors: Sören Pirk, Matt Fisher, Vova Kim Developed a neural representation of procedural noise for inverse material modeling.

# **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

Learning 3D Adversarial Cloaks for Deep Object Detectors [PDF] Synthesized adversarial textures that robustly cloak humans from object detectors.

**UT** Austin May '19 - June '20

Undergraduate Researcher, Advisor: Prof. Chandrajit Bajaj

# Playing Chess with Limited Look Ahead

[PDF]

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

### Triangle Inscribed-Triangle Picking

[PDF]

Derived the probability density function and moments of the area of stochastically generated inscribed triangles.

# Google Scholar

PUBLICATIONS 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.

MANUSCRIPTS Learning Transferable 3D Adversarial Cloaks for Deep Trained Detectors. Arman Maesumi\*, Mingkang Zhu\*, Yi Wang, Tianlong Chen, Zhangyang Wang,

Chandrajit Bajaj, 2020.

# HONORS &

# NSF Graduate Research Fellowship (GRFP)

April '22

University Honors, Dean's List, President's List

2020, 2018, 2017

MD5 Hackathon: 1st Place Entry

2017

Awarded \$15,000 grant from Department of Defense

### **SKILLS**

## **Programming Languages**

Python, Go, Java, C/C++, JavaScript, TypeScript, Mathematica

# Tools $\mathcal{E}$ Technologies

PyTorch, TensorFlow, Keras, PyTorch3D, NumPy, LATEX, Linux

### Miscellaneous

Blender, Adobe Photoshop/Illustrator, Cinema 4D, Octane Render, OpenGL, Three.js

### **SOFTWARE**

# GPU-Accelerated Radial Basis Function Interpolator

pip install torchrbf

https://github.com/ArmanMaesumi/torchrbf

### PERSONAL GitHub

### 3D Art Portfolio

https://www.behance.net/armanmaesumi

# HumanBenchmark Verbal Memory

735pts (>99.5 percentile)

### Rubik's Cube Personal Record

11.25 seconds