Andrew Peterson

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EDUCATION

Brown University, Providence, RI
Sc.M. in Computer Science, expected May 2021
Sc.B. in Applied Math and Computer Science, graduated May 2020, *Magna cum laude*
GPA: 4.0/4.0

Wesleyan University, Middletown, CT
Fall 2016 to Spring 2017
GPA: 4.06/4.0

Relevant Coursework: Interactive Computer Graphics, Topics in 3D Game Engine Development, Introduction to 3D Computer Animation, Computer Vision, Deep Learning, Computational Photography, Introduction to Computer Graphics, Machine Learning, Computational Probability and Statistics, Recent Applications of Probability and Statistics

WORK EXPERIENCE

Brown University Department of Computer Science, Providence, RI
Head Teaching Assistant, Topics in 3D Game Engine Development, October 2020 – Present

- Prepare course presentations and assignments for Spring 2021

Research Assistant, Visual Computing Lab, September 2020 – Present

- Work with Daniel Ritchie to investigate how editable programs representing objects can be used in 3D-aware image editing
- Apply visual program induction techniques to infer explicit 3D representations of objects from images
- Investigate neural rendering techniques to automatically apply textures extracted from an image of an object to an edited version of the object

Undergraduate Teaching Assistant, Spring 2019 – Present

- Worked as a TA for *Introduction to Computer Science*, *Introduction to Robotics*, *Machine Learning*, and currently *Introduction to Computer Graphics*
- Hold TA hours each week to assist students with coursework and debugging programs
- Grade homework and coding projects, and hold design checks with students
- Develop assignments and course presentations

Applied Research Associates, Raleigh, NC
Software Development Intern, Summer 2020

- Developed C++ program for testing augmented reality software for defense
- Collaborated with augmented reality team to create a testing program that suited the needs of the project
- Detailed how the program can be used and extended as the project develops

MIT Lincoln Laboratory, Lexington, MA
Summer Research Intern, Advanced Capabilities and Technologies Group, Summer 2019

- Investigated the use of sparse approximation algorithms to detect weak signals in sensor data
- Worked with supercomputing center to implement sparse approximation algorithms for large datasets
- Demonstrated how updated methods reduced false discoveries

Sun Valley Swim & Tennis Club, Lexington, MA
Swim Coach, Swim Instructor, and Lifeguard, Summer 2013 – 2018

- Coached daily workouts for swim team, provided private and group swim lessons

SKILLS AND INTERESTS

Skills: C, C++, Maya, OpenGL, Python, MATLAB, Java
Interests: Animation, video games, film, drawing, recording music, guitar, piano, jazz saxophone/clarinet, running (competed in 2016 Philadelphia Marathon; qualified for and competed in 2018 Boston Marathon)