

## Andrew Peterson

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### EDUCATION

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#### **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:** Intermediate Computer Animation, Interactive Computer Graphics, Topics in 3D Game Engine Development, Deep Learning, Distributed Computer Systems, Introduction to Computer Graphics, Computer Vision, Computational Photography, Introduction to 3D Computer Animation, Machine Learning, Computational Probability and Statistics, Recent Applications of Probability and Statistics

### WORK EXPERIENCE

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#### **Brown University Department of Computer Science**, Providence, RI

*Head Teaching Assistant, Topics in 3D Game Engine Development*, October 2020 – Present

- Create presentations and assignments for new course topics including skeletal animation, rigid body physics simulation, and real-time indirect illumination
- Give course lectures, hold TA hours, and grade coding projects

*Research Assistant, Visual Computing Lab*, September 2020 – Present

- Investigate how editable programs representing objects can be used in 3D-aware image editing
- Apply deep learning techniques to infer explicit 3D representations of objects from images

*Undergraduate Teaching Assistant*, January 2019 – December 2020

- Worked as a TA for Introduction to Computer Science, Introduction to Robotics, Machine Learning, and Introduction to Computer Graphics
- Held TA hours each week to assist students with coursework and debugging programs
- Graded homework and coding projects, and held design checks with students
- Developed assignments and course presentations

#### **Applied Research Associates**, Raleigh, NC

*Software Development Intern*, Summer 2020

- Developed C++ program for testing augmented reality software
- 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 optical 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

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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)