

# Loudon Cohen

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## LINKS

GitHub: [github.com/loudonclear](https://github.com/loudonclear)

LinkedIn: [linkedin.com/in/loudoncohen](https://www.linkedin.com/in/loudoncohen)

BRGD: [blogs.brown.edu/browngamedev](https://blogs.brown.edu/browngamedev)

## CS COURSEWORK

### UNDERGRADUATE

Intro to Computer Graphics (cs1230)

Interactive Computer Graphics (cs2240)

Computer Vision (cs1430)

Deep Learning (cs2470)

Modern Web Apps (cs1320)

User Interfaces (cs1300)

Multiprocessor Synchronization (cs1760)

2D Game Engines (cs1971)

3D Game Engines (cs1950U)

## SKILLS

### LANGUAGES

Proficient:

C/C++ • C# • Java • Python • GLSL

Comfortable:

x86 asm • HTML/CSS • Javascript

### TECHNOLOGIES

Proficient:

OpenGL • Vulkan • Unity • Git • Unix •

Comfortable:

OpenVR • Unreal Engine

## HACKATHONS & GAME JAMS

### 24 HOUR PRODUCTS

Train of Thought (2019)

- MIT Trolley Problem mobile game

Wizard Dimension Warp (2018)

- Procedural VR infinite runner

Don't Feed the Pigeon (2017)

- Cartoon beat 'em up survival

Don't Shoot the Messenger (2016)

- 2 player networked strategy game

Lumen (2016)

- Level-based logic/puzzle game

YoYo Hero (2015)

- Grappling-hook platformer

## REFERENCES

Available upon request

## EDUCATION

### BROWN UNIVERSITY | PROVIDENCE, RI

BS in Computer Science | May 2019

- Visual Computing and Game Engines focus
- Magna Cum Laude, 3.91 GPA

Masters in Computer Science | May 2020

## EXPERIENCE

### RESEARCH | BROWN UNIVERSITY

- Spring 2019 - Present: Visual Computing Lab researcher and Virtual Reality Lab manager

### TEACHING ASSISTANT | BROWN UNIVERSITY

- Spring 2019: cs2240 - Interactive Computer Graphics Head TA
- Fall 2018: cs1230 - Intro to Computer Graphics Head TA
- Fall 2017: cs1230 - Intro to Computer Graphics TA

### ID TECH | NORTHWESTERN UNIVERSITY

- Summer 2018 - Assistant Director: Instructor management position, curriculum oversight, interpersonal relations and team organization
- Summer 2016/2017 - Instructor: Taught young adults (ages 11-18) C++, Java, Cryptography | Created and executed a full CS curriculum in each subject

## PROJECTS & RESEARCH

### SHAPE FROM TRACING

Present

- Optimization and application of the "Redner" framework to solve the "shape from shading" problem for complex materials

### SPATIO-TEMPORAL VARIANCE-GUIDED FILTERING

Spring 2018

- An OpenGL/C++ implementation of SVGF. Uses a spatially-aware hierarchical filter combined with temporal accumulation/reprojection to attempt real-time denoised path-tracing

## HONORS & AWARDS

- Computer Science Department Senior Prize
- Brown Undergraduate Research Symposium Honorable Mention

## ACTIVITIES

### BROWN RISD GAME DEVELOPMENT CLUB | LEAD PROGRAMMER

Sep 2015 – Present

- E-board member. Both participates in and advises semester-long game development
- Representative at industry conferences (Boston FIG, PAX (East), GDC)