

OSCAR DADFAR



[email omitted]
[phone omitted]
www.cardadfar.com



Mission. Integrating Animation, AI, & Architecture (3 A's) into smart, high-performance digital tools to help non-artists create art.

Experience. more at cardadfar.com/experience



Research Engineer

Adobe Research | | Aug 2022 - Current

- Smart Masking in Premiere Pro (v.25.4) [2025]
 - + 5x speedup of vector mask tracker.
 - + Clip/Frame-mode edits to modify individual or keyframe groups.
 - + User transforms added alongside pre-existing path transforms.
- Primrose (Adobe's wearable dress tech) [2023]
 - + Built After Effects render pipeline for dress animations for NYC Fashion Week
 - + Created dress animations showed at Adobe MAX 2023 USA & Japan
 - + Most-viewed Adobe MAX sneak in history

Professor of Computer Science

Carnegie Mellon University | | Spring 2022 - Current

Offering courses in the computer science department.

Core Animation Intern

Apple | | Spring 2021

Worked on the graphics compositing engine behind every Apple device with a display by developing benchmark statistics to help monitor render pipelines.

Video Application Intern

Apple | | Summer 2020

Researched real-time AR shaders for iOS with intelligent scene understanding optimized for performance and battery-usage.

Teachings. more at cardadfar.com/index



Adjunct Instructor | | Carnegie Mellon University

Computer Graphics | 15-462/662 | Fall 2023, Fall 2024

Created a new set of lectures for the course on topics such as vector rasterization, mesh editing, raytracing & kinematics

Visual Computing Systems | 15-469/669 | Spring 2022, Fall 2023, Fall 2024

A special topics course at the intersection of computer architecture & computer graphics/vision for graduate and advanced undergraduates

Animation & Video Editing | 98-331 | Fall Semesters

Teaching students video editing, motion graphics, kinetic typography, hand-drawn, & vector-based animation.

Building Personal Websites | 98-177 | Spring Semesters

Created course to teach students fundamentals of HTML, CSS & jQuery while assisting students with building their own sites.

Projects more at cardadfar.com/projects



3A2A: 3D-Assisted 2D Animation

ICIG 2021

< <http://cardadfar.com/assets/projects/3A2A.pdf> />

Converting 2D stick-figure drawings to posable 3D characters that are toon-shaded and sketched to create 2D animations from stick-figures.

Autonomous Environmental Texturing

CCGIV 2021
Best Presentation

< cardadfar.com/projects/#gan-theft-auto />

Texturing a procedurally-generated semantic-segmented city in Unity using Pix2Pix trained on the CityScape and GTA V dataset.

OpenPose Motion Capture Parser

< cardadfar.com/projects/#idance />

Built a polygon rendering environment that converts 2D motion capture JSON data into an After Effects readable format.

Education.

Carnegie Mellon University



Masters of Science in
Computer Science
4.00 GPA May 2022



Bachelor's of
Computer Science & Art
3.93 GPA Dec. 2020



Minor in Computer Graphics



Minor in Machine Learning



Minor in Computational Physics

Skills.

After Effects	Python
Flash Prof.	JavaScript
Premiere Pro	C / C++
Illustrator	Obj-C
Photoshop	Swift
Fresco	HTML / CSS

Real-Time Rendering
Graphics Architecture
Generative Deep Learning
Web App Development
2D/3D Animation
Video Editing

Coursework.

Computer Graphics & Vision
Parallel Computer Architecture
Deep & Reinforcement Learning
Advanced Computational Physics
2D Computer Animation
Art & Machine Learning