

# Alejandro Zapata Acosta

azapataa@g.ucla.edu • github.com/capnsquirrel • linkedin.com/in/azapataa

## EDUCATION

### M.S. in Computer Science (Specialization in Computer Graphics)

UCLA, Los Angeles, CA

Expected June 2021

### B.S. in Computer Science

Loyola Marymount University, Los Angeles, CA

Minors: Pure Mathematics, Animation

August 2015 - May 2019

GPA: 3.84

Dean's List (All Semesters)

**RELEVANT COURSES:** Multivariable Calculus, Intro. 3D Animation, Programming Languages, Interactive Animation (UE4), Game Design (Unity), Motion Capture/Facial Capture, Artificial Intelligence, Software Engineering Lab, Linear Algebra, Databases, Computer Networks, Optimization, Artificial Life for Computer Graphics and Vision (in Spring 2020).

## SKILLS

**Programming Languages:** Java (5 yrs.), JavaScript (4 yrs.), Python (3 yrs.), C++ (2 yrs.), C#, C, React JS

**Technical Skills:** Web development, Computer Graphics, Procedural Content Generation

**Software experience:** Photoshop CS6, Clip Studio Paint, Maya, Blender, Unreal Engine 4, Unity, Motion Builder, Faceware Analyzer.

**Languages:** Bilingual in English and Spanish (Written and Verbal), beginner Japanese (Written and Verbal).

## RELEVANT EXPERIENCE

### Teaching Assistant at UCLA

Introduction to Computer Science I (Intro. C++) Teaching Assistant

Los Angeles, CA

Fall 2019, Winter 2020

- Class covers basics of programming with **C++** up to object-oriented programming with classes/structs.
- Lead 40 students in a weekly two-hour discussion of class material.

### Technical Director / Gameplay Programmer (LMU CS Senior Thesis)

Game development senior thesis project.

Los Angeles, CA

February 2019 – May 2019

- Directed communications between artist and programmers, managed and integrated assets through custom development pipeline, and designed and implemented core gameplay.
- Unity 3D project (in **C#**) with 4-player networked capability. Designed and implemented 4 unique skills for 5 playable characters.

### Radii Robotics

Software Development Intern

Los Angeles, CA

August 2018 – January 2019

- Developed a prototype web application (with **React JS** and **Material-UI**) for the Radii Robotics user portal with a focus on design for the data analysis / interpretation report page.
- Created mockups for the web application (in **Photoshop**) for design meetings.

### Summer Undergraduate Research Program

Student research project, advised by Dr. Andrew Forney

Los Angeles, CA

May 2018 – July 2018

- Developed a tool for random procedural generation of role-playing-game dungeons using causal inference on a dynamically generated Bayesian network (in **Python** with **Pomegranate**).

## PRESENTATIONS

- Zapata, A., & Forney, A., (April, 2019). Causal Inference in Procedural Dungeon Generation. Presented at the LMU Undergraduate Research Symposium, Los Angeles, CA.
- Zapata, A., & Forney, A., (November, 2018). Causal Inference in Procedural Dungeon Generation. Presented at the Southern California Conference for Undergraduate Research, Pomona, CA.

## ACCOMPLISHMENTS AND AFFILIATIONS

- Outstanding Computer Science Senior (Highest GPA in Major)
- RAINS Undergraduate Research Fellow
- International Collegiate Programming Contest, Top 20 in SoCal
- Association for Computing Machinery, Co-President
- Outstanding Computer Science Freshman (Highest GPA in Major)
- Social Justice Scholarship (Full Undergrad Tuition)