# Vincent Escueta

106 North Rock River Dr. Diamond Bar, CA 91765

(909) 896-9844 • vincent.escueta22@gmail.com • vincent-escueta22.github.io/Website

$\mathbf{F}\mathbf{D}$	AT	ION

### University of California, Berkeley

Berkeley, CA

College of Engineering

2014 – 2018 (Expected)

Electrical Engineering and Computer Science B.S.

**Diamond Ranch High School** 

Pomona, CA 2010 - 2014

# **ACHIEVEMENTS**

Salutatorian

2014

**Disney Scholar Program Scholar** 

2014 – Present

#### TECHNICAL SKILLS

- Programming Languages: C++, C, Java, Python, Scheme, MIPS, SQL, GLSL
- Common Linux Utilities: Git, ssh, vim, etc.
- Animation Software: Autodesk Maya, Blender
- Graphic Design Software: Adobe Photoshop

#### **PROJECTS**

Gitlet

Spring 2015

Created a simple, but efficient version of Git using Java, without any given skeleton code, to understand the use of Data Structures by using Hash Maps, Hash Sets, and Linked Lists.

A Tail Tale Spring 2015

In a group of five, a minute long 3D Animated Short was created using Maya by developing all the character models, creating the environments, and applying lighting and shading.

**PathTracer** *Spring 2016* 

Created a program that take COLLADA files, which contain at least one light source, and renders images of those files using global (direct and indirect) illumination. The images are rendered efficiently due to bounding volume hierarchy algorithms and the program has implementations for mirror and glass objects.

Rasterizester Spring 2016

Created a program that could rasterize images using svg files. Rasterizing lines and triangles, antialiasing, transforming objects, rasterizing gradient colored shapes using barycentric coordinates, texture mapping using pixel sampling such as bilinear sampling, and level sampling with mipmaps were all implemented.

GeoMenagerie *Spring* 2016

Created a program that loads COLLADA mesh files that could be edited by implementing functions that tessellate Bezier surfaces into triangles to create objects from a given mesh, manipulate half-edge meshes using splitting and flipping, implement Loop subdivision, and apply shaders to the objects.

## WORK EXPERIENCE

#### **CS61A: Structure and Interpretation of Computer Programs**

Berkeley, CA

Lab Assistant

Store Clerk

*Spring 2015* 

Helped and guided students through the weekly labs, homework assignments, and projects.

#### **B & E Bowling Supply**

Diamond Bar, CA

2010 - 2014

- Assisted customers with bowling inquires for equipment, accessories, etc.
- Assisted in back office work such as filing, inventory, bowling ball maintenance, etc.

LEADERSHIP/	SE	RV	<b>ICE</b>
-------------	----	----	------------

Vice President Best Buddies	2012 - 2014
Member Solar Boat	2012 - 2014
President National Honor Society	2013 - 2014
Player Berkeley Starcraft II Team	2014 – Present
Volunteer Loaves and Fishes	2015 – Present