

# Stephanie Lace Chang

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## Education

### The Animation Collaborative

Jan 2019 – Present

### Northwestern University

Master of Science, Robotics | GPA **3.96/4.0**

Sept 2016 – Dec 2017

### University of California, San Diego

Bachelor of Science, Bioengineering: Biotechnology | Major GPA **3.74/4.0**

Sept 2011 – June 2015

## Skills

<b>Drawing</b>	Photoshop (Krita), Oil Paint, Pencil, and Ink
<b>3D Modeling</b>	AutoCAD, SolidWorks, NX, Onshape
<b>Prototyping</b>	3D Printing (PolyJet, Fused Deposition Modeling, powder bed and inkjet), Laser Cutting, Laser Scanning, and CNC Milling, and Foamcore
<b>Software</b>	Python, C, Linux, and Git

## Relevant Classes/Workshops

• Character Design Fundamentals	Grant Alexander (Pixar)
• Animation Demo and Lecture	Michal Makarewicz (Pixar)
• Principles of VFX	Shawn Kelly (Industrial Light & Magic)
• Specificity and Acting for Animation	Victor Navone (Pixar)
• Animation vs. Character Animation	Tal Shwarzman (Pixar)
• Phrasing: The Secret Animation Principle	Daniel Klug (Disney)
• Visual Comedy	Tracy Burns

## Relevant Projects

### 3D-Printed Smartphone Case

Sept 2017 – Dec 2017

- Fabricated a flexible protective case for the Samsung Galaxy S3 out of hybrid plastics via PolyJet 3D printing
- Modeled the case in SolidWorks around a laser scan of the phone rendered using Geomagic Design X
- Refined the fit, usability and durability of the design after subjecting each iteration to stress testing and gathering peer feedback

### Aluminum and Acrylic Sculpture

Oct 2017 – Nov 2017

- Designed and modeled a 10" x 10" x 4" mixed media sculpture in SolidWorks
- Carved the 4" x 4" x 1.75" centerpiece out of aluminum using a CNC mill
- Fabricated the decorative housing unit out of acrylic using a laser cutter

### Android Controlled Path-Following Robot

June 2017

- Created a differential drive robot that can steer itself around a racetrack
- Modeled and built a housing unit out of laser cut acrylic and 3D-printed PLA to secure custom-made circuitry
- Programmed a PIC32 microcontroller using C to modulate the velocity of two wheels
- Implemented an Android application for pathfinding via real-time image parsing and USB CDC communication with microcontroller to keep the robot centered

## Work Experience

### Life Science Research Professional I, Stanford University School of Medicine (Palo Alto, CA)

Jan 2016 – Aug 2016

- Fabricated epicardial collagen patches, which facilitate heart muscle repair following myocardial infarction, for clinical studies using mice and swine
- Conducted quality control tests to ensure patches were suitable for transplantation

### Lab Technician I, Sanford Burnham Prebys Medical Discovery Institute (La Jolla, CA)

Aug 2015 – Dec 2015

- Modulated the composition of fluorescent biosensors, developed during a previous internship, to improve their sensitivity to endogenous microRNA fluctuations in healthy and stressed rat neonatal ventricular cardiomyocytes