

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

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