

SIMON NG

Los Angeles, CA • +1 414 882 9172 • ngsimon@ucla.edu • [linkedin.com/in/simon-a-ng](https://www.linkedin.com/in/simon-a-ng) • github.com/S-Ng

EDUCATION

UNIVERSITY OF CALIFORNIA, LOS ANGELES – Bachelor of Science, Bioengineering

Expected June 2021

Cumulative GPA: 3.92

Relevant Coursework: Computational Modeling, Thermodynamics for Bioengineers, Organic Chemistry, Chemistry Lab

RESEARCH EXPERIENCE

DI CARLO LAB – Research Assistant

September 2018 - Present

- Designed microfluidic and cell experiments to test viability of varied methods for single cell encapsulation in hydrogels.
- Manufactured microfluidic devices in clean room to create and study chemotherapeutic drug release from polymer gels.
- Characterized drug release profile by optimizing microscope time-lapse features, increasing number of data points 16-fold.

KHADEMHOSEINI LAB – Research Assistant

January 2018 - September 2018

- Optimized bioprinting protocols for 2 bioprinters and developed printed vascularization techniques for tissue engineering.
- Taught 24 lab members bioprinting techniques and provided technical advice for 6 bioprinting projects.
- Prepared and presented graduate-level research presentations summarizing project results and impacts.

PROJECT EXPERIENCE

BIOMEDICAL ENGINEERING SOCIETY – Automated Pill Dispenser Design Team Member

October 2018 - Present

- Animated automated pill dispenser in Fusion360 and AutoCAD for visualization and 3D printing and set meeting goals.
- Integrated custom 3D-printed parts with stepper motors and Arduino microcontroller into functional dispensing unit.

NASA MICRO-G NEXT – Under-Ice Sampling Device Team Lead

September 2017 - November 2017

- Led team of 4 to write technical proposal in LaTeX and design electrothermal microgravity ice drill in AutoCAD.
- Planned outreach event for elementary school children to “engineer” microgravity ice cream sampling devices.

EAGLE SCOUT PROJECT – Ecological Survey Leader

June 2016 - June 2017

- Trained and supervised groups of 15 volunteers on 3 outings to systematically survey a 145-acre nature preserve.
- Analyzed and summarized data from 98 plant species in a report designed to help protect the preserve’s biodiversity.
- Presented PowerPoint of results to over 60 preserve members at the annual member’s meeting and answered questions.

WORK EXPERIENCE

UCLA HOUSING AND HOSPITALITY – Assistant Sustainability Manager

June 2018 - September 2018

- Developed 7 Excel VBA macros to automate tracking of 22 buildings’ utilities and \$21 million of annual food expenditures.

UCLA RESIDENTIAL LIFE – Sustainable Living Community Development Intern

September 2017 - June 2018

- Independently managed \$1300 budget for over 25 sustainability-related events available to 90 student residents.
- Coordinated over 20 student groups and local organization to table at UCLA’s beginning of the year sustainability fair.

SKILLS

Laboratory: Skilled at bioprinting | Proficient at microfluidics, cell culture, microscopy, clean room work, and machining

Software: Skilled at CAD | Proficient at MATLAB, Python, VBA, and Microsoft Suite | Novice at Arduino and LaTeX

Language: Conversational in Spanish and fluent in English

MEMBERSHIPS & AWARDS

GE-Reagan Foundation Scholar – UCLA Student Sustainability Leader – UCLA Dean’s Honor List – LEED Green Associate

BSA Eagle Scout – High School Valedictorian – National Merit Scholar – Outstanding Research Poster, WInSTEP SEPA Conference