lucyktan@gmail.com

(646) 496-5523

lucyktan.github.io

**Education** 

Case Western Reserve University - Cleveland, OH

B.S., Computer Science, with additional coursework in Biomedical Engineering

August 2012 - January 2017 (expected)

Stuyvesant High School - New York, NY

High school diploma

September 2008 – June 2012

**Projects** 

A Year Of. Aug 2015 – present

(in progress) Developer and Designer

A social good iOS app for philanthropy and a better educated global citizenry

It Takes A Village

Jan 2015 - May 2015

lucyktan.github.io/ItTakesAVillage

Developer and Designer

• A therapeutic game built in Unity3D for parents with postpartum depression

Coursework

Computer Sci. Matlab, Java, Data Structures, Theoretical Computer Science,

Computer Organization Logic Design, Game Design and Implementation

Mathematics Calculus I & II for Engineers, Logic, Multivariate Calculus,

Differential Equations, Statistics for Engineering and Science,

**Discrete Mathematics** 

In Progress Algorithms, Computer Networks, Operating Systems and Concurrent Programming,

Database Systems, Software Engineering

Additional Systems Thinking, Professional Communications, Philosophy,

Science and Religion, Bioethics, Memory Illusions, Psychology of Faces,

Chemistry of Materials, Organic Chemistry, Polymer Science, Statics and Strength of Materials, Physiology and Biophysics I & II

**Relevant Skills** 

Primary Java

Proficient Matlab, LaTeX, Git, C#, C, HTML/CSS, JavaScript, Verilog,

Unity3D, Origin, ImageJ

In Progress Python, Linux/UNIX, SQL

**Experience** 

Alsberg Stem Cell and Engineered Novel Therapeutics Lab

Sep 2013 - Aug 2014

Case Western Reserve University - Cleveland, OH

Research Assistant

- Prepared and conducted experiments towards a project on controlled growth factor release via microspheres in 3D cell culture for vascularized bone tissue engineering
- Attended weekly lab group meetings and presented biweekly project reports

# **Experimental Pathology Lab in the Dept of Pathology**

Sep 2012 - May 2013

Case Western Reserve University - Cleveland, OH

Research Assistant

 Genotyped, bred, and maintained over 50 different mice strains to be used in immunology experiments at the Animal Resource Center and Dirty Quarantine Room

#### Biomechanics and Mechanotransduction Laboratory

Columbia University - New York, NY

Mar 2011 - Dec 2011 Research Assistant

- Designed and conducted an independent research project on the effects of mobile phone radiation on human keratinocyte migration in vitro
- Received the Intel Science Talent Search (formerly known as Westinghouse) 2012 semifinalist award

#### Activities

### Women in Science and Engineering Roundtable (WISER)

Sep 2014 - present

Organization within CWRU

Mentor and Member

- Mentor first-year undergraduate women in science and engineering
- Provide science experiment demonstrations to young girls in local schools

#### **Case Emergency Medical Services (EMS)**

Sep 2012 - May 2014

Organization within CWRU

Shift Officer

- Delivered emergency health services to campus community with EMT-Bs
- Measured blood pressure, blood glucose, heart/respiratory rate of patients
- Transported patients to University Hospital or Cleveland Clinic

#### **Perry Outreach Program**

Apr 2012 - Apr 2012

An initiative for women in engineering

Selected Participant

Attended presentations and hands-on workshops (tibia ex-fix, scoliosis correction, fractures) given by orthopedic surgeons at the Hospital for Special Surgery

### **CWRU Fencing Club**

Sep 2012 - May 2013

Organization within CWRU

Foil Fencer

### High 5 Teen Reviewers and Critics Program

Mar 2012 - June 2012

An initiative for the arts and humanities

Dance performance critic

- Attended weekly writing workshops and performances in the NYC dance scene
- Wrote and revised literary reviews and critiques on dance performances

Sep 2010 - May 2012 **Girls Write Now** 

A program and initiative for professional women writers

Mentee

- Performed two readings of original written pieces to audience of over 100 people
- Attended weekly meetings and writing workshops with professional women writers

#### **Awards**

Sep 2014 – present
Sep 2012 – present
2012
2012
2012
2012
2011
2011
2011, 2012

## **Foreign Languages**

Mandarin Chinese (fluent)

Spanish (proficient)