lucyktan@gmail.com

(646) 496-5523

lucyktan.github.io

Education Case Western Reserve University - Cleveland, OH

High school diploma

B.S., Computer Science

August 2012 – January 2017 (expected)

September 2008 - June 2012

Stuyvesant High School - New York, NY

Projects

A Year Of. (in progress)

Aug 2015 – present

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, 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
- Troubleshot new protocols and analyzed results
- 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 and a total of over 800 mice at any given time to be used in immunology experiments at the Animal Resource Center
- Extensive use of organizational skills and oversight of a large mice database

#### **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 female undergraduates in STEM fields
- Volunteer at outreach activities for K-12 girls to participate in STEM

#### **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

Participated in weekly practices and attended local competitive tournaments

# 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 NYC dance performances
- Wrote and revised reviews and critiques on dance performances

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

A program and initiative for professional women writers

- Performed two readings of original written pieces to audiences of over 100 people
- Attended weekly meetings and writing workshops with professional women writers on expository writing, the short story, the novel, and various literary genres

# **Awards**

CWRU Alumni Association Junior/Senior Scholarship	Sep 2014 – present
CWRU University Scholarship	Sep 2012 – present
Intel Science Talent Search Semifinalist	2012
Random House Creative Writing - Honorable Mention for Poetry	2012
Scholastics Art & Writing Awards – Gold Key for Writing Portfolio	2012
Scholastics Art & Writing Awards – Silver Key for Poetry	2012
Scholastics Art & Writing Awards – Silver Key for Poetry	2011
Published in CALIPER (Stuyvesant High School literary magazine)	2011
Published in Girls Write Now Anthology	2011, 2012

## **Foreign Languages**

Mandarin Chinese (fluent) Spanish (proficient)