

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

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 Process Algorithms, Computer Networks, Operating Systems, 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

Projects

It Takes A Village

Jan 2015 – May 2015

lucyktan.github.io/ittakesavillage

Game Developer and Designer

- A therapeutic game built in Unity3D for parents with postpartum depression
- Produced by 10 game developers and designers, and 5 psychology students

Experience

Alsberg Stem Cell and Engineered Novel Therapeutics Laboratory

Case Western Reserve University – Cleveland, OH

Undergraduate Research Assistant

Sep 2013 – Aug 2014

- 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 Laboratory in the Department of Pathology

Case Western Reserve University – Cleveland, OH

Undergraduate Research Assistant

Sep 2012 – May 2013

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

Biomechanics and Mechanotransduction Laboratory

Columbia University – New York, NY

Research Assistant

Mar 2011 – Dec 2011

- 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 semi-finalist award

Activities

Women in Science and Engineering Roundtable (WISER)

Undergraduate Mentor and Member

Sept 2014 – present

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

Case Emergency Medical Services (EMS)

Shift Officer

Sept 2012 – May 2014

- 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

Selected Participant

April 2012 – April 2012

- 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

Foil Fencer

Sep 2012 – May 2013

High 5 Teen Reviewers and Critics Program

Dance performance critic

Mar 2012 – June 2012

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

Girls Write Now

Mentorship Program

Sep 2010 – May 2012

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

Awards

CWRU Alumni Association Junior/Senior Scholarship

Sept 2014 – present

CWRU University Scholarship

Sept 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)

- Visit lucyktan.github.io for my 1-page resume -