

ZHIYUAN LIU

(302) 824-5107 ◊ zliu1@swarthmore.edu
500 College Avenue, Swarthmore, PA 19808

EDUCATION

Swarthmore College, Swarthmore, Pennsylvania

B.A, Computer Science, B.A Mathematics;

Expected: May 2018

Relevant Coursework: Data Structures & Algorithms, Several Variable Calculus, Linear Algebra,
Computer Systems, Discrete Mathematics, Computer Graphics, Databases, Computer Security

Current Coursework: Modern Algebra, Artificial Intelligence, Theory of Computation, Computer Animation

Charter School of Wilmington, Wilmington, Delaware

June 2014

TECHNICAL SKILLS

Proficient Python, C++, C, L^AT_EX

Familiar Javascript, HTML/CSS, Verilog, IA-32 Assembly, R

EMPLOYMENT

MathPlus, LLC: Teaching Assistant

Summer 2013 - 2014

- Teaching assistant for students in grades 1-12
- Guided students through extensive mathematical topics including algebra, geometry, calculus, SAT math and math competition practice

Art of Problem Solving Online School: Grader

2013 - Present

- Grader for math classes aimed at gifted middle and high school students. Classes assisted include a wide variety of topics such as algebra, number theory, combinatorics, geometry, or calculus.
- Grade various problems assigned to students in groups of classes, providing extensive written feedback to a large quantity of students

Swarthmore College Swat Smash Club: Event Planner

Spring 2014

- Organize small and large scale gaming events of up to one hundred players
- Managed facilities and resources necessary to provide a high quality, streamlined event

UniversityTutor: Tutor

Spring 2014

- Tutored for high school and college students in various math topics and SAT testing
- Taught and supported students year round, SAT tutees scoring average 2200+

AltSchool: Extern

Winter 2015

- Externship at AltSchool, learned product design, management, Ember.js framework
- Tested coding challenge for potential engineer interviewees; timeline app in Javascript

Incyte Corporation: Intern

June 2016 - August 2016

- Interned as a data analyst in the pharmacokinetics department
- Wrote scripts and apps in R, worked with big data and efficient processing and analysis of said data

PROJECTS

Swarthmore Smash: Live streaming

Fall 2015

- Ran a professional quality live stream on twitch.tv for local gaming events
- Advanced usage of programs such as Photoshop, OBS, XSplit, and Apache; overlays designed with Javascript, jQuery, and PyQt to produce high quality interactive animations and scoreboard editing

Tri-co Hackathon: Shoppr

Spring 2015

- Created a web app for Trico Hackathon revolving around budget shopping
- Utilized Python and Flask framework along with Google Maps and Yelp APIs

Incyte: Table One

Summer 2016

- Created an app for Incyte which processed large amounts of data and can quickly generate specific graphs and TableOne, a summary table required in all FDA reports
- Utilized Shiny and R

HackMIT: MentalX

Fall 2016

- Created an small game derived from Connect 4
- Includes near-unbeatable AI which learns using Monte Carlo search trees

HONORS AND AWARDS

HackerRank World Cup Semifinalist

Fall 2015

EXTRACURRICULARS

President of the **Swarthmore Smash Club**

Fall 2015 - present

Hobbies: Weightlifting, rock climbing, video game competitions (Smash Bros. Melee), tennis (local USTA league)