

Kelly Tan

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EDUCATION

University of Pennsylvania Philadelphia, Pennsylvania

Candidate for Master of Science in Engineering (M.S.E.) in Computer Science, GPA 4.00/4.00 Expected Dec 2017

Bachelor of Science in Engineering (B.S.E.) in Computer Science, GPA 3.84/4.00 May 2017

Minor in Mechanical Engineering & Applied Mechanics and Mathematics

- *Honors and Awards:* Summa Cum Laude, Dean's List (2016-17, 2015-16, 2014-15), ECAC Scholar Athlete of the Year (2017, 2016), Tau Beta Pi Honor Society Member, Eta Kappa Nu Honor Society Member
- *Computer Science Coursework:* Virtual Reality Practicum; Advanced Programming; Programming Paradigms; Database and Information Systems; Theory of Computation; Introduction to Networks and Security; Internet and Web Systems; Robotics; Introduction to Algorithms; Computer Organization and Design; Software Design/Engineering; Computer Operating Systems;
- *Mechanical Engineering Coursework:* Introduction to Robotics; Product Design; Engineering Mechanics: Dynamics; Machine Design and Manufacturing; Statics and Strength of Materials; Introduction to Mechanical Design;

WORK EXPERIENCE

University of Pennsylvania Philadelphia, Pennsylvania

[*Database and Information Systems*](#) Teaching Assistant

January 2017 - May 2017

[*Automata, Computability, and Complexity*](#) Teaching Assistant

August 2016 - December 2016

- Provide guidance to students during weekly office hours and assist the professor in grading assignments and exams

Google New York City, New York

Software Engineering Intern, Superroot: Search Infrastructure

May 2016 - August 2016

- Expanded Search's integration test to include more generalized and specific runs
- Wrote the design document and general documentation for the project

University of Pennsylvania Philadelphia, Pennsylvania

[*Internet and Web Systems*](#) Teaching Assistant

January 2016 - May 2016

[*Automata, Computability, and Complexity*](#) Teaching Assistant

August 2015 - December 2015

- Provide guidance to students during weekly office hours and assist the professor in grading assignments and exams

Google Mountain View, California

Software Engineering Intern, Content in AdWords Front End

May 2015 - August 2015

- Implemented the UI for AdWords' new [Customer Match](#) which involved interactions with the back end and other front end components and displays of file upload progress and status

University of Pennsylvania Philadelphia, Pennsylvania

Student-Athlete Tutor

September 2014 - May 2015

- Tutor other student-athletes weekly in introductory computer science and mechanical engineering courses

Google San Bruno, California

Engineering Practicum Intern, AdWords for Video

May 2014 - August 2014

- Added key functionality to a new feature for AdWords for Video
- Wrote the design document for the project

SKILLS

Languages

- **Java/GWT** (experienced)
 - Used in Internet and Web Systems, Google Software Engineering Internship, Software Design/Engineering
 - Projects include Datalake Management System, Search Engine, and [Portal game](#)
- **Haskell** (proficient)
 - Used in Advanced Programming and Programming Paradigms
 - Projects include an [image processing library](#)

- **Python** (proficient)
 - Used in Google Software Engineering Internship and Robotics
 - Projects include implementing search algorithms and orienting and navigating an iRobot Create
- **JavaScript/ThreeJS** (proficient)
 - Used in Virtual Reality Practicum and Penn Play Game Jam
 - Projects include a [procedurally generated VR experience](#)
- **HTML/CSS** (proficient)
 - Used in Google Software Engineering Internship and Women in Computer Science Webmaster project
 - Projects include [Webmaster project](#)
- **Prolog** (familiar)
 - Used in Programming Paradigms
 - Projects include a [text-based adventure game](#)
- **Clojure** (familiar)
 - Used in Programming Paradigms
 - Projects include a color grid solver and a sharks simulation
- **Protocol Buffers** (familiar)
 - Used in Google Software Engineering Internship
- **Scala** (familiar)
 - Used in Programming Paradigms
 - Projects include Jotto and n-Grams
- **SQL** (familiar)
 - Used in Database and Information Systems
- **Arduino** (familiar)
 - Used in Silicon Garage
 - Projects include [PianoBlog](#), an Arduino piano that automatically uploads to [SoundCloud](#) ([GitHub](#))
- **C** (familiar)
 - Used in Computer Operating Systems and Introduction to Computer Architecture
 - Projects include basic computer simulation, a terminal shell, and a basic operating system
- **Dart** (familiar)
 - Used in Google Engineering Practicum Internship

Software

- **Amazon Web Services (DynamoDB, EC2, S3, Elastic Beanstalk)** (familiar)
- **Git/GitHub** (proficient): <https://github.com/kellyktan>
- **Unreal Engine** (proficient)
 - Used in Virtual Reality Practicum
 - Projects include [Escape the Room VR](#) and [VRy Paint](#)
- **SolidWorks/ProtoTRAK** (proficient)
 - Used in Machine Design and Manufacturing and Introduction to Mechanical Design
 - Projects include modeling and machining a stirling engine and [modeling a mechanical object](#)

EXTRACURRICULAR ACTIVITIES

University of Pennsylvania Varsity Gymnastics Team Member (NCAA Division I)

- Eastern College Athletic Conference Scholar Athlete of the Year (2017, 2016)
- NACGC Scholastic All-American (2017, 2016, 2015, 2014)
- USA Gymnastics Scholar Athlete (2017, 2016, 2015)
- Eastern College Athletic Conference All-Academic Team Member (2017, 2016, 2015)
- Philadelphia Inquirer Academic All-Area Team Member (2017)
- Penn Gymnastics Most Consistent Award (2017, 2016, 2014)
- Penn Gymnastics Rookie of the Year Award (2014)

Women in Computer Science Residential Program: Board Member (2014 - 2017)

- Organize and run events such as dinner discussions, outreach workshops, and tech treks
- Provide mentorship and guidance for younger members

Tau Beta Pi Honor Society Member

- Nation's second-oldest honor society representing the entire engineering profession

Eta Kappa Nu Honor Society Member

- Honor society dedicated to encouraging and recognizing excellence in the electrical and computer engineering field

Hackathons

- PennApps (Fall 2016 Top 10 Finalist, Fall 2015, Spring 2015, Fall 2013)
 - [CalPal](#) - an iOS application that uses computer vision to detect photo details to auto-populate a calendar event (Fall 2016, Top 10 Finalist)