

# William Liu

☎ (608) 886 - 3074 / @willixl@cmu.edu / 🌐 williamliu.me

## Education

### Carnegie Mellon University

BS, Class of 2020

Electrical and Computer Engineering  
Alpha Epsilon Pi

### Coursework (and number):

Cognitive Psychology (85-211)

Imperative Programming (15-122)

Matrices (21-241), 3D Calc (21-259)

Probability Theory (36-217)

## Skills

### Technical:

Python, C, HTML, Javascript, CSS,  
Arduino, Raspberry Pi, Unity 3D

### Design:

SolidWorks, InDesign, Photoshop,  
Illustrator, AutoCAD, Inventor, Laser  
Cutting, Blender, 3D Printing

### Misc:

LaTeX, Gantt Charts, Chinese,  
Spanish

## Awards/Honors

### PennApps | 2017

Best Hardware Hack

### TartanHacks | 2017

TartanHacks Grand Prize, Facebook's  
Favorite Hack

### NASA | 2016

Centennial Challenge 2nd Place

### United States Congress | 2016

Congressional Award

### St. Mary's Hospital | 2016

Award for 200 Volunteer Hours

Updated: Oct 11, 2017

## Experience

### The Articulab | Research Assistant | Aug 2017 — Present

Researched how to design user modeling infrastructure for  
social-aware machine learning to build rapport

### Computer Architecture Lab | Researcher | Dec 2016 — Present

Researching energy-aware DRAM architecture and new  
techniques in graph data structures in virtual memory.

### Carnegie Mellon | Teaching Assistant | Aug 2017 — Present

Teaching *Principles of Computation*. Leading recitation of 30  
students and holding office hours.

## Projects

### InvenTeX | [devpost.com/software/toolhub](https://devpost.com/software/toolhub)

Internet-enabled mechanical sorter. Designed over 60  
individually cadded pieces. Integrated the communication system.  
*Built with: Inventor, Python, C, OpenCV, Arduino, Raspberry Pi*

### ResistAR | [devpost.com/software/resistar](https://devpost.com/software/resistar)

Augmented Reality Circuit Solver. Designed the user interface for  
the project and the hardware components.  
*Built with: Unity 3D, C#, Blender, Solidworks*

More can be found at [williamliu.me/portfolio.html](http://williamliu.me/portfolio.html)

## Publications

### “Experimental Characterization and Analysis of DRAM Energy Consumption and Variation” *Under Peer Review.*

G Yaglikci, R Gupta, **W Liu**, K Chang, K Kudrolli, A Agrawal, D Lee,  
N Chatterjee, M O'Connor, S Ghose, and O Mutlu. *ASPLOS 2018.*

## Clubs/Activities

### Scotch'n'Soda Theatre | Stage Manager | Dec 2016 — Present

Stage Managed: Rosencrantz and Guildenstern Are Dead,  
Heathers: The Musical, Young Frankenstein. Also Webmaster.

### CMU Tricking Club | Founder, President | Nov 2016 — Present

Tricking is “an aesthetic blend of gymnastics, martial arts, and  
breakdancing.” Found the club and expanded it.

## Interests/Misc.

Top 100 Pokémon Player, Competitive SMITE, Filmmaking