

# Q Liu

q42liu@gmail.com | Latest CV at [github.com/quinnliu/CV](https://github.com/quinnliu/CV)

## FUN TECHNICAL PROJECTS

[infinity2o.com \(http://infinity2o.com\)](http://infinity2o.com) | Dec. 2017 – Present

- Built using AWS, Docker, MySQL, Node.js Loopback RESTful API, & Redux/React.js.

[Open Source Artificial General Intelligence\(AGI\) Research \(https://github.com/WalnutiQ/wAlnut\)](https://github.com/WalnutiQ/wAlnut) | 2011 – 2015, 2017

350+ total public & private videos on College Level CS & Math education at [youtube.com/quinnliuvideos \(https://www.youtube.com/user/quinnliuvideos\)](https://www.youtube.com/user/quinnliuvideos) | 2013 – 2015, 2017

Machine Learning, Computational Neuroscience, & Robotics | 2013, 2017

- Coded neural networks, linear, & logistic regression in Matlab at [quinnliu/MachineLearning \(https://github.com/quinnliu/MachineLearning\)](https://github.com/quinnliu/MachineLearning) for prediction & MNIST digit recognition.
- Neuron modeling in Matlab at [quinnliu/ComputationalNeuroscience \(https://github.com/quinnliu/ComputationalNeuroscience\)](https://github.com/quinnliu/ComputationalNeuroscience).
- Simulated [7 DOF forward kinematics robotic arm \(https://github.com/Hunter690/catkin\\_ws\)](https://github.com/Hunter690/catkin_ws) in ROS & Python to learn precision movement to end effector.

iOS app to allow anyone to listen to music at the exact same time as someone else | Early 2017

- [Video demo \(https://www.youtube.com/watch?v=WXTufUtmZYg\)](https://www.youtube.com/watch?v=WXTufUtmZYg) of full stack iOS app using React Native, Redux, Node.js, & websocket server.  
[Client code \(https://github.com/Laybium/laybium\)](https://github.com/Laybium/laybium) & [server code \(https://github.com/Laybium/laybium\\_server\)](https://github.com/Laybium/laybium_server).
- [Apple App Store link \(https://appsto.re/us/zQZYfb.i\)](https://appsto.re/us/zQZYfb.i). App is no longer maintained because I don't want to pay AWS fees.

[Technical Drawings \(https://github.com/quinnliu/CV/blob/master/portfolio/artwork.md\)](https://github.com/quinnliu/CV/blob/master/portfolio/artwork.md) | 2009 – 2012

## SELF EDUCATION

MOOCS from Stanford, Columbia Uni., etc. | 2013 – Present

- Courses at [coursera.org\(4\)](https://www.coursera.org), [edx.org\(1\)](https://www.edx.org), [udacity.com\(1\)](https://www.udacity.com), & [lynda.com\(7\)](https://www.lynda.com) ([./portfolio/courses\\_taken.md](#)).

Full time student at Classical Art Studio [barnstonestudios.com \(barnstonestudios.com\)](https://barnstonestudios.com) | Summer 2010 & Summer 2011

- Worked 100+ hours/week for 10 weeks each summer to learn classical drawing,

design, & oil painting techniques including gold section & fletcher color system to produce  
[visual portfolio \(https://github.com/quinnliu/CV/blob/master/portfolio/artwork.md\)](https://github.com/quinnliu/CV/blob/master/portfolio/artwork.md).

## FORMAL EDUCATION

**Virginia Tech Computer Science Major [GPA: 3.59] | 2011–15**

- Courses at [Virginia Tech\(43\) \(./portfolio/courses\\_taken.md\)](#)

## JOB EXPERIENCE

**Remote coding tutor | Sept. 2016 – Present**

- Private coding tutor teaching D3.js, Redux/React.js, & Python.
- Lived in Berlin, Prague, Copenhagen, Virginia, & Texas.

**Full time Business systems developer at [AppNexus \(http://www.appnexus.com/\)](http://www.appnexus.com/) | Summer 2015 – Sept. 2016**

- From provided UI sketches co-developed with a senior software engineer 7 screens that used a **RESTful API**, Redux/React.js to allow contracts with clients to be created, edited, cloned, & deleted.
- Planned out & delivered a 1 month project to create new reports using **RESTful APIs** & a **PHP UI codebase**.

**Business systems intern at AppNexus & [hackNY Fellow \(http://hackny.org/a/\)](http://hackny.org/a/) | Summer 2014**

- Synchronized data across an internally built web app called Console and Salesforce.com using technologies including RabbitMQ, Storm, PostgreSQL, Gradle, Spock, JIRA, & Groovy ready for production.

**TA for my favorite CS course at Virginia Tech Software Design & Data Structures | Spring 2014**

- Taught 4 hour labs/week & held office hours on android development & Java.

**Full time researcher at Vision Lab at John Hopkins University Clark Hall | Summer 2013**

- Optimized code for random walk image segmentation for iOS app iMixPics. [Paper \(./portfolio/random\\_walker\\_image\\_segmentation\\_on\\_iOS\\_devices.pdf\)](#) & [Poster \(./portfolio/Poster\\_iMixPics2.jpg\)](#)
- Participated in a variety of biomedical research workshops through [Computational Sensing & Robotics REU \(http://lcsr.jhu.edu/reu/\)](http://lcsr.jhu.edu/reu/).

**Part time researcher at Vision Neuroscience Lab at Virginia Tech Williams Hall | Fall 2012**

- Interdisciplinary research with neuroscientist Dr.Cate on models of spatial learning in visual pathway of human brain with [Poster \(./portfolio/Scieneering\\_Poster\\_\(5MB\).jpg\)](#).

**Dishwasher at Virginia Tech West End | Fall 2012 & Spring 2013**

# COMMUNITIES

## [hackNY Fellow \(http://hackny.org/a/\)](http://hackny.org/a/) | Summer 2014

- Lived together with 25 other developers in the program & had a lecture series with founders of top NYC based tech companies including Joel Spolsky (Trello & stackoverflow), Jonah Peretti(HuffPo & BuzzFeed), Fred Wilson(USV), Zach Sims(codecademy), Ryan Bubinski(codecademy), etc. to learn the ins & outs of starting & leading a startup.
- Help with accounting using quickbooks & review of hackNY applications.

## Co-founded Visual Art Club at Virginia Tech | 2011 – 2013

- Taught 20+ members through 2 hour/week workshops about the classical visual arts. Started the club with 2 friends also passionate about visual arts.
- Members with competence in other areas were also given the opportunity to present.

## [The Recurse Center \(https://www.recurse.com/\)](https://www.recurse.com/) | Summer 2015

# SMALLER FUN TECHNICAL PROJECTS

- \* = Code is a school project & therefore not shown but happy to share if requested.
- Git
  - Cheat sheet at [quinnliu/GitCommands](https://github.com/quinnliu/GitCommands) (<https://github.com/quinnliu/GitCommands>).
- Java
  - Android maze solver app & minesweeper app.
  - Earthquake watcher service\* using public earthquake API.
  - Memory manager\* & Buffer pool\*.
- C
  - [Buffer Bomb \(https://github.com/quinnliu/bufferBomb\)](https://github.com/quinnliu/bufferBomb), MIPS assembler, *Extendable shell*, Thread pool, & *Malloc*.
- Web development
  - Amazon EC2, HTML, CSS, Javascript, Node.js, & Heroku product kickstarter\*.
  - Google App Engine in Python\*.
- Finished Jersey City Triathlon 2016 with single gear bike.