

# Q Liu

## SUMMARY

As a kid I spent most of my time drawing everything I was curious about to eventually create a [visual portfolio \(https://github.com/quinnliu/CV/blob/master/portfolio/artwork.md\)](https://github.com/quinnliu/CV/blob/master/portfolio/artwork.md). My last big drawing was a partial human brain which inspired me to research the human brain by coding the first [open source AGI in 2011 \(https://github.com/WalnutiQ/wAlnut\)](https://github.com/WalnutiQ/wAlnut). I majored in CS in college but was unhappy with the cost of higher CS education so I created [100+ non-clickbait YouTube videos on college level Math & CS that have grossed 6.6 million+ minutes watched \(https://www.youtube.com/user/quinnliuvideos\)](https://www.youtube.com/user/quinnliuvideos). In college I finished 10+ online CS & Machine Learning courses & worked in vision & neuroscience labs at John Hopkins & Virginia Tech. During & after college I loved learning how to be a founder at hackNY & full stack engineer at AppNexus. Although I <3 NYC I wanted to travel the world so I left AppNexus to become a remote coding tutor and travel Europe. I believe unexpensive quality higher education is still a unsolved problem so I founded [www.infinity2o.com](http://www.infinity2o.com) with my brother.

emn1over12@gmail.com | Latest CV at [github.com/quinnliu/CV](https://github.com/quinnliu/CV)

## FUN TECHNICAL PROJECTS

[www.infinity2o.com \(https://www.infinity2o.com\)](http://www.infinity2o.com) | Jan. 2018

- Why: To help people find partners for their online classes. How: React.js/Redux, Google Oauth, MongoDB, Express, Heroku, Stripe API, & Sendgrid API.

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

100+ public & 250+ 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

- 6.6 million+ minutes watched ~= 13 years

Machine Learning & Robotics | 2013, 2017

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

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

- [Video demo \(https://www.youtube.com/watch?v=WXTufUtmZYq\)](https://www.youtube.com/watch?v=WXTufUtmZYq) 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>) | 2002 – 2012

- To explore my curiosity drew everything I wanted to better understand.

## SELF EDUCATION

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

- Courses at [coursera.org](https://www.coursera.org)(4), [edx.org](https://www.edx.org)(1), [udacity.com](https://www.udacity.com)(1), [udemy.com](https://www.udemy.com)(1), & [lynda.com](https://www.lynda.com)(7) ([./portfolio/courses\\_taken.md](https://github.com/quinnliu/CV/blob/master/portfolio/courses_taken.md)).

**Full time student at Classical Art Studio** [barnstonestudios.com](https://www.barnstonestudios.com) ([barnstonestudios.com](https://www.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](https://github.com/quinnliu/CV/blob/master/portfolio/courses_taken.md)(43) ([./portfolio/courses\\_taken.md](https://github.com/quinnliu/CV/blob/master/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 \(http://lcsr.jhu.edu/reu/\)](#).

#### **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
  - AWS Compute Service, Docker, MySQL, Node.js Loopback RESTful API, & Redux/React.js\*.
  - Amazon EC2, HTML, CSS, Javascript, Node.js, & Heroku product kickstarter\*.
  - Google App Engine in Python\*.
- Matlab
  - Computational Neuroscience Neuron modeling in Matlab\*.
- Finished Jersey City Triathlon 2016 with single gear bike.