

Q84 Liu

emn1over12@gmail.com | Latest CV at github.com/quinnliu/CV

Job Interest

Looking for a full-time remote full stack developer position using Python, artificial narrow intelligence, machine learning, image processing, range of databases(MySQL, PostgreSQL, MongoDB, etc.) & message queues(RabbitMQ, etc.).

FUN TECHNICAL PROJECTS

[infinity2o.com \(http://infinity2o.com\)](http://infinity2o.com)(coming soon) | 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

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 App is no longer maintained because I don't want to pay AWS fees.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](https://www.coursera.org)(3), [edx.org](https://www.edx.org)(1), [udacity.com](https://www.udacity.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 (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>).

JOB EXPERIENCE

Part Time Volunteer at [hackNY](http://hackny.org/a/) (<http://hackny.org/a/>) | Aug. 2017 – Present

- Help with accounting using quickbooks & review of hackNY applications.

After AppNexus projects finished left to work as remote coding tutor & travel | Sept. 2016 – Aug. 2017

- 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](https://github.com/quinnliu/CV/blob/master/portfolio/random_walker_image_segmentation_on_iOS_devices.pdf) ([./portfolio/random_walker_image_segmentation_on_iOS_devices.pdf](https://github.com/quinnliu/CV/blob/master/portfolio/random_walker_image_segmentation_on_iOS_devices.pdf)) & [Poster](https://github.com/quinnliu/CV/blob/master/portfolio/Poster_iMixPics2.jpg) ([./portfolio/Poster_iMixPics2.jpg](https://github.com/quinnliu/CV/blob/master/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

FORMAL EDUCATION

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

- Courses at [Virginia Tech\(43\)](#) (./portfolio/courses_taken.md)
- Last semester GPA dropped < 3.0 to pursue startup idea

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.

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/>) dropout | 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>).
- 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>), 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.