Q Liu

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

FUN TECHNICAL PROJECTS

Full stack email survey creator (https://rocky-wildwood-97943.herokuapp.com) | Jan. 2018

• To allow users to send ~200,000 e-mail suveys per campaign used Google Oauth, MongoDB, Express, Heroku, Stripe API, & Sendgrid API.

Open Source Artificial General Intelligence(AGI) Research (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) | 2013 - 2015, 2017

• To study more efficiently taught the material simply.

Machine Learning & Robotics | 2013, 2017

- For simple prediction & MNIST digit recognition coded neural networks, linear, & logistic regression in Matlab at <u>quinnliu/MachineLearning</u> (https://github.com/quinnliu/MachineLearning).
- To learn precision movement to end effector simulated <u>7 DOF forward kinematics robotic arm (https://github.com/Hunter690/catkin_ws)</u> 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=WXTufUtmZYg) of full stack iOS app using React Native, Redux, Node.js,
 & websocket server.
 Client code (https://github.com/Laybium/laybium) & server code (https://github.com/Laybium/laybium server).
- Apple App Store link (https://appsto.re/us/zQZYfb.i). App is no longer maintained because I don't want to pay AWS fees.

<u>Technical Drawings (https://github.com/quinnliu/CV/blob/master/portfolio/artwork.md)</u> | 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 <a href="mailto:courses-at-course-at-courses-at-courses-at-courses-at-courses-at-courses-at-cours

Full time student at Classical Art Studio <u>barnstonestudios.com</u> (<u>barnstonestudios.com</u>) | 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).

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/) | 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/) | 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 <u>Computational Sensing & Robotics REU (http://lcsr.jhu.edu/reu/)</u>.

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 <u>Poster</u> (./portfolio/Scieneering <u>Poster</u> (5MB).jpg).

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

COMMUNITIES

hackNY Fellow (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/) | Summer 2015

SMALLER FUN TECHNICAL PROJECTS

- * = Code is a school project & therefore not shown but happy to share if requested.
- Git
- Cheat sheet at <u>quinnliu/GitCommands</u>
 (https://github.com/quinnliu/GitCommands).
- Java
- Android maze solver app* & minesweeper app*.
- Earthquake watcher service* using public earthquake API.
- Memory manager* & Buffer pool*.
- C
- <u>Buffer Bomb (https://github.com/quinnliu/bufferBomb)</u>, 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.