**LIU, Qinhan Henry**

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**CAREER**

**JPMorgan Chase & Co. |** *Summer Technology Analyst*Jun. 2018 - Aug. 2018

* Analyzed business flows and identified pain points of the operations.
* Designed several automated solutions including web application and cloud application.
* Helped implement the cloud solution.
* Received pretty positive feedbacks overall throughout the internship.

**Nanosystem Fabrication Facility HKUST |** *Web Developer* Jun. 2017 – Dec. 2017

* Built a web application for managing the inventory of chemical gases using ASP.Net and C#.
* Retrieved data from remote MS Server and displayed reports using C3.js.

**EDUCATION**

**Hong Kong University of Science and Technology |** Hong KongSept. 2015 - Present

Bachelor of Computer Science and Engineering Expected Graduation: Jun. 2019

CGA: 3.792/4.3 09/2015-08/2018 TGA: 4.17/4.3 09/2016-11/2016

**Georgia Institute of Technology** | Atlanta US Jan. 2018 - May. 2018

Undergraduate Exchange Student Program

TGA: 3.75/4.0 01/2018-05/2018

**No.1 Middle School of Chenzhou** | Chenzhou China Sept. 2012 - Jun. 2015

College Entrance Examination: 673/750

**Awards**

**Ho & Ho Foundation Scholarship** | *Awardee* Sep. 2015 - present

* Awarded a full tuition fee of 120k HKD and a life allowance of 50k HKD each year while studying in HKUST by the performance of Gaokao.

**Dean’s List of the School of Engineering** 2016-2017 Fall, 2017-2018 Spring & Fall

**RESEARCH EXPERIENCE**

**Undergraduate Research Opportunity Program HKUST** Jun. 2017 - Aug. 2017

*Machine Learning on Wearable Devices | Team member*

* tried out major machine learning models using “scikit-learn” to anticipate people’s emotions based on their walking videos.
* designed and conducted the collection of emotion and video data while people walking.
* selected motion parameters and features to feed machine learning models using “caffe-yolo”.

**Undergraduate Research Opportunity Program HKUST** Jun. 2016 - Aug. 2016

*Visual-based Formation Flight of Micro Aerial Vehicles | Team member*

* assembled a quardrotor and tuned up the bluetooth and Pixhawk Flight Controller using qgroundcontrol.
* succeeded to fly the aerial vehicle and obtained flying experience.
* designed a user interface (UI) for easy sending instructions to the vehicle by a single click.

**Chinese National Physics Olympiad** Sept. 2014

won the 1st class prize in Hunan Province out of all 390,000 high schoolers.

**Chinese National Math Olympiad** Sept. 2014

won the 2nd class prize in Hunan Province out of all 390,000 high schoolers.

**ACADEMIC PROJECT**

**“Data & Visual Analytics” CX 4242 Georgia Tech** Jan. 2018 - May. 2018

Repo: <https://github.com/qliuan/CX4242>

* Collected data from Twitter REST API, visualized the data using Gephi, used D3.js to visualize the data, used Google Refine for data cleaning and practiced Flask and JQuery for Web Dev.
* Visualized the data using Tableau, finished a force-directed graph, a scatter plot, a heatmap, a dendrogram (collapsible tree) and a choropleth map using D3.js.
* Tried out Hadoop, Spark/Scala, PIG and used Azure ML Studio for regression model.
* Completed a scalable single-PC PageRank program on 70M edge graph using Pypy, implemented Random Forest Classifier and practiced Scikit-Learn.

**“Introduction to Database Systems” CS 4400 Georgia Tech** Jan. 2018 - May. 2018

Repo: <https://github.com/qliuan/vue>

* Studied the principles of database management system in the lectures.
* Designed the data tables, constraints and wrote up SQL language for retrieving data in a given context.
* Built a web application solution using node.js, vue.js and MySQL database.

**“Introduction to AI” COMP 3211 HKUST** Sept. 2017 - Nov. 2017

Repo: https://github.com/qliuan/AI\_Of\_Felix\_the\_Cat.git

* used scikit-learn and tensorflow to build an AI for the board game “Felix the Cat”
* a supervised learning method SVM achieved 40% winning rate in a 4-player game with baseline 25% winning rate.
* a reinforcement learning AI achieved only 30% winning rate due to lack of training time.

**Extra Curriculum Activities**

**HKUST Robotics Team Internal Competition** | *Hardware* Designer Nov. 2015

* drew the PCB (printable circuit board) for the mother board and well soldered it.
* designed an easy-to-maintain wire connection for all components.
* invented a circuit for detecting the cylinder containing badminton implementing properties of conductor.

**SKILLS**

**Languages** Mandarin (native), English (fluent), Cantonese (conversational)

**Programming** Python, javascript, C++, C#, ASP.Net experienced in full stack development, machine learning, data mining & visualization