

# CHICU LI

Seeking for 2020 Summer Internship | [www.linkedin.com/in/chiqu](https://www.linkedin.com/in/chiqu)  
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## EDUCATION

|   |                   |
|---|-------------------|
| <b>Columbia University</b>  | 09/2019 - 12/2020 |
| Master of Science, Mechanical Engineering (Robotics)  | New York, NY      |
| <b>Wuhan University</b>   | 09/2015 - 06/2019 |
| Bachelor of Engineering, Power System (GPA: 3.6/4.0)  | Wuhan, CN         |
| <b>Relevant Courseworks:</b> Cloud Computing & big Data, Databases, Deep Learning, Data Science, Evolutionary Algorithm, Robotics |                   |

## SKILLS

Programming: Python, Java, JavaScript, C/C++, SQL, HTML, CSS, Linux Shell  
Technologies & Tools: AWS, Microservices, RESTful, Git, Flask, Bootstrap, TensorFlow, Keras, OpenGL, ROS

## PROJECTS

|   |                   |
|---|-------------------|
| <b>Restaurant Reservation Serverless Website</b>  | 02/2020           |
| <ul style="list-style-type: none"><li>Built a serverless and dynamic website with AWS S3, Cognito, API Gateway, Lambda and DynamoDB</li><li>Created chatbot using Lex, adopted SQS queue to store information and sent message by SNS</li><li>Crawled NYC restaurant information in Yelp with Requests and stored in Elasticsearch for further search</li></ul>   |                   |
| <b>Sports Information Interactive Web</b>   | 09/2019 - 12/2019 |
| <ul style="list-style-type: none"><li>Managed and maintained Baseball Players database with SQL</li><li>Developed functions based on Flask framework and RESTful API to send HTTP requests to access databases</li></ul>  |                   |
| <b>Image Classification Deep Learning Projects</b>  | 09/2019 - 12/2019 |
| <ul style="list-style-type: none"><li>Trained and visualized multiple CNN models to classify and recognize 10,000 pictures into specific categories and achieved 98% accuracy based on Google Cloud Computing, TensorFlow Keras and TensorBoard</li><li>Collected a dataset including hundreds of landmark pictures at Columbia University, trained a model from scratch and used data augmentation to improve accuracy</li><li>Converted a trained classification model to TensorFlow.js to predict the type of objects in pictures on a webpage</li></ul> |                   |
| <b>Genetic Programming(GP) Projects</b>   | 09/2019 - 12/2019 |
| <ul style="list-style-type: none"><li>Conducted Evolutionary Algorithm(EA) to solve Travelling Sales Person Problem and Symbolic Regression, which reached 1% error in 100,000 generations</li><li>Strengthened GP selection method by using Deterministic Crowding and Hierarchical Fair Competition</li><li>Created and visualized a 3D evolved robot with a variable morphology in C++ and OpenGL</li></ul>  |                   |
| <b>Robot Operating System (ROS) Projects</b>  | 09/2019 - 12/2019 |
| <ul style="list-style-type: none"><li>Accomplished subscribing and receiving joint movements of robots by python packages in Ubuntu16.04</li><li>Developed a cartesian control and inverse kinematics package to manipulate robot's pose and velocity to ideal positions</li><li>Implemented RRT and A Star algorithm to achieve sampling-based motion planning on KUKA and UR5</li></ul>   |                   |

## INTERNSHIP

|   |                   |
|---|-------------------|
| <b>Project Analyst</b> , Imperial Vision -- Fuzhou, CN  | 07/2019 - 08/2019 |
| <ul style="list-style-type: none"><li>Participated in building a hard hat recognition system to increase safety at the construction site by TensorFlow, which can directly recognize humans with or without a hard hat on the head</li><li>Analyzed, visualized over 50,000 face images to assess machine learning models and enhance image quality</li></ul> |                   |

## AWARDS

|   |             |
|---|-------------|
| Excellent Student Scholarship   | 2017 & 2018 |
| 1st Prize in National Energy Saving & Emission Reduction Technology Competition       | 2018        |
| Women's Team Championship of the College Student Tennis Competition of Hubei Province | 2017        |