

# Jincheng Zhang

70 Morningside Dr 2710 Columbia Student Mail, New York, New York, 10027

(781)530-6034 jincheng.zhang@columbia.edu jczhang.com github.com/zhjch05

## Education

**Computer Science B.S.** Brandeis University GPA 3.5 May 2017

**Computer Science B.S.** Columbia University in the City of New York May 2019

Linear Algebra, Multi-variable calculus, Probability & Statistics, Discrete Math, Structures and Interpretation of Computer Programs, Spoken Dialog Design, Web Development & Incubator, Data Structures, Computer Science Theory, Software Engineering, Operating System, Artificial Intelligence, Machine learning, Advanced Programming in Unix Environment, Analysis of Algorithms

## Programming Skills Stack

Proficient: C++, Java, Ruby, Python, Javascript, HTML5/CSS3 Prior Experience: C#, Emacs Lisp, Scheme

Familiar with: Meteor.js, Ruby on Rails, Node.js Can use: Angular 2, iOS cocoa, Bash, Git, Unix, Linux Apache, Nginx

## Experience

**Handwritten Math Expressions Recognition** Spring 2017

Created a preprocessor and a classifier to recognize basic handwritten math expressions with Convolutional Neural Network in Tensorflow, and OpenCV. Team of 3.

**Voice Control Chess** Summer 2015

A voice-enabled chess game: designed a rule based NLP and Dialog System to move chess by voice

Created a PvP match feature with meteor's built-in socket based push data service

Html5/CSS3&Flexbox/Javascript/Meteor.js/MongoDB/Regex. Team of 3.

**Duewiz - Homework Reminder** Spring 2016

Web scraping School's education website to make due dates for homework manageable

Ruby on Rails 5: Action Cable (web socket), Active Job (asynchronous processing), redis cache

Web scraping with mechanize (CSS selector and XML XPath). Team of 4.

**Cars Simulation at toll** Spring 2017

A simple python MVC architecture to visualize/animate a cellular automaton model to simulate car streams traffic at toll.

Python 3, MVC, matplotlib animation

**Code2html – Atom editor plugin**

More than 400 public downloads. Convert code to html based literals to render in my blog website Spring 2016

**Chat Program in LAN**

Chat server and multiple clients implemented with GUI, TCP/IP winsock (socket API) Visual Basic 2012

## Leadership and Teamwork

Team leader and major code contributor in computer science projects all listed above.

Volunteer leader of tour guides of a former residence in Qing Dynasty. 2011-2014

## Awards

Second Class in National Olympiad in Informatics in Provinces C++, Algorithms Competition 2013

Youths Developers Seminar Hackathon first place iOS, Objective-C, HTTP Restful with AFNetworking 2014

First place in Computer Science Research & Study in High School Affiliated to Renmin University of China

Wrote a thesis on two-way conversion of code and its flowcharts (parsing C++) (GUI in C#) 2013