# MAGGIE CAO

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## PROFILE

Energetic software developer who creates applications using high-tech implementations. Self-starter with hands-on experience in machine learning using Keras, Tensorflow and multiprocessing.

#### SKILLS

#### WORK EXPERIENCE

Happy Landing Games — Freelance Software Developer

New York, NY - Mar. 2018 - Present

• Working with two Brooklyn College alumni to develop a mobile game application in Unity.

 $Star\ Scholars\ Academy\ --\ Private\ Tutor$ 

Brooklyn, NY - Apr. 2018 - Present

• Directs lessons in mathematics and writing during one-on-one sessions with charter school kids and high school students.

#### EDUCATION

Brooklyn College — B.S. in Computer Science

Brooklyn, NY - Sep. 2014 to Dec. 2017

*GPA:* 3.39/4.00 | Selected Coursework: Workstation Programming, Information Security, Analysis of Algorithms, Operating Systems, Object-Oriented Programming

Cooper Union - Irwin S. Chanin School of Architecture

New York, NY - Sep. 2008 - May 2013

Selected Coursework: Digital Logic Design, Microcontroller Projects, Computer Architecture

### **PROJECTS**

AI Fashion Mobile — Spark, Tensorflow, Python 3

Apr. 2018 - Present

• Developing an IOS application for classifying fashion brand names in real time video analysis and image recognition by scraping modern fashion data from the web.

Simple Shapes Classification using CNN — Keras, Python 3

Sep. 2017 - Dec. 2017 - 3.5 mos. | https://mahgieeee.github.io/cnn\_project\_details.html

- Trained a convolutional neural network that can classify 2-D shapes on a Google Cloud VM.
- Test set performed at a 90% accuracy with a 1% loss on 20,000 images.

Mirai Botnet Research/Testing — Linux, mySQL

May 2017 - 1 mo. | https://mahgieeee.github.io/MiraiSecurityProject.pdf

- Executed the Mirai source code using two Linux servers.
- Analyzed the cross-compiling processes, loaders and CNC tables that were necessary for master and bot configurations.

Rotate K Game — Google Code Jam, OOP, C++

Apr. 2016 - May 2016 - 3 mos. | https://mahgieeee.github.io/Google\_Code\_Jam/Board.html

• A two-player k-matched horizontally, vertically or diagonally board game where it can be rotated once. Simulation of OS-C++

Apr. 2016 - May 2016 - 2 mos.

- Handled software interrupts and used process scheduling algorithms to emulate the job processes of an operating system.
- Program handled I/O and other requests made by a secondary program.

Microcontroller Parallel Park Car — Arduino

Mar. 2012 - May 2012 - 3 mos. | https://mahgieeee.github.io/microcontroller.html

• Wirelessly controlled the directions of the car's movement and created an Arduino implementation that could automatically parallel park on its own in between two objects.

Simple Enigma Machine — Digital Logic Design

Mar. 2011 - May 2011 - 3 mos. | https://mahgieeee.github.io/Enigma\_Machine\_Project.pdf

• Manually built the Enigma machine with self-designed digital logic of analog circuits.