

## (Katrina) Jie Jiao

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Github: <https://github.com/rabbit721>

### Education

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Carnegie Mellon University, Pittsburgh, PA

May 2022

Bachelor of Science in Mathematical Sciences, double major in Computer Science

GPA: 4.0/4.0

### Skills

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**Programming Languages:** Python, SML, Java, C, C#

**Packages and Frameworks:** Numpy, Scipy, Tensorflow, Keras

**Tools:** Git, Unix, Linux;

### Work Experience

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Meteorological Science and Technology Center, IAP, CAS<sup>1</sup>, Beijing, CHN

Jun 2019 – Sept 2019

Research Intern, *Visibility Estimation based on Single Image*

- Designed a Neural network ensemble to estimate visibility distance from images
- Parsed data from meteorological sensors for analysis and preprocessed images for training
- Constructed low-level features from images for better perception of haze and illumination
- Presented progress in weekly workshops for discussion and feedback

Language Technology Institute, CMU, Pittsburgh, PA, U.S

Oct 2018 – May 2019

Research Assistant, *Zoom City*

- Designed user interface and developed programs that identify geometric shapes from users' drawings on canvas as part of a children's book project
- Implemented interactions and animations in JavaScript/TypeScript and HTML5 in an Ionic Cordova app using angular

### Project Experience

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AI Representation and Problem Solving, CMU, Pittsburgh, PA, U.S.

Jan 2019 – May 2019

*AI Pacman*

- Implement algorithms, including Q-Learning, TD-Learning, Markov Decision Process, Hidden Markov Model, Particle filtering, in Python to teach pacman (the game agent) to find optimal paths
- Program using reinforcement learning and logical planning achieved performance comparable to best human players

Game Creation Society, CMU, Pittsburgh, PA, U.S.

Sept 2018 – Jan 2019

*Overshot (Unity Game Project)*

- Scripted for UI elements and created scriptable objects as assets in a Role-Playing Game

### Related Coursework

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\* Introduction to Computer Systems, \* Parallel and Sequential Data Structures and Algorithms  
Principles of Functional Programming, Principles of Imperative Computation

1. IAP, CAS stands for The Institute of Atmospheric Physics, Chinese Academy of Sciences

\* Course currently taking