

# Lihua (Neo) Pei *June 24, 1996*

Last update on September 30, 2018

lihua.peidata@gmail.com • lihuapei@gwu.edu • +1 847-848-5805 • <https://lihuapeineo.github.io>  
1600 South Eads ST, Apt 632N, Arlington, VA, 22202.

---

## Education

Stony Brook University

**Bachelor degree in Applied Mathematic & Statistics (AMS)**

GPA: 3.55/4.00

STONY BROOK, THE NEW YORK STATE

*Sep 2014 – Dec 2017*

The George Washington University

**Master degree in Data Analytics**

DISTRICT OF COLUMBIA

*Sep 2018 – 2020*

---

## Skills

### Computer Skills:

- \* Programing Languages: **Python, Java, C, MATLAB, R, SAS and Excel**
- \* Database Management: **Mongo dB**
- \* Personal interest: **Advanced Photoshop Designer** and Parallel Computing (MPI)

**Natural languages:** English (*Professional and Proficiency in reading and writing*), Chinese (*Native*).

---

## Experience

Optimal Topologies Searching Research Project

STONY BROOK UNIVERSITY

**Research Assistant**

*Aug 2017 – present*

- \* Designed and Implemented an algorithm to generate and search the optimal degree 3 topologies with 64 nodes and Successfully find the optimal 64k3 topologies by applying the algorithm on High-performance Computer.
- \* **Built and maintained the local database for storing the all generated topologies by Python.**
- \* Designed the experiment to test five MPI Broadcast methods on Tasishan Clusters to collect datasets of communicational efficiency between different topologies and visualized the results

Parallel Matrix Multiplication Research

STONY BROOK UNIVERSITY

**Second Author**

*Dec 2017 – present*

- \* Proposed an algorithmic group that covers practical parallel large-scale matrix multiplication.
- \* Collected and analyzed the results of experiments on Seawolf supercomputer and used the Python and Photoshop to visualized the result.

Scala Computing

GRAND CENTRAL TECH, NEW YORK CITY

**Scheduling Project Designer**

*Jan 2018 – May 2018*

- \* Designed the digrams and graphs to show the a new reinforcement learning model PANDA (Policy Advisor Network and Decision Architecture)
- \* Programed the preliminary simulation and established the database to implement in PANDA model.

Fire Pillar Studio

HONG KONG, CHINA

**Android Games Developer & Database Developer**

*Jun 2017 – Present*

- \* Developing a deep-learning program MIB (make it breath) which can auto recognize the characters in pictures and make charaters have a action like breathing.
- \* Working on developing and maintaining local database for deep-learning training.
- \* Working on art and virtual design

National Supercomputer Center in Jinan

JINAN, CHINA

**High-Performance Computing Research Assistant**

*May 2018– July 2018*

- \* Maintained clusters and collected experimental datasets.
- \* Assisted to analysis experimental results.

*Please refer to my portfolio website (<https://lihuapeineo.github.io>) for a more complete list of project and work experiences.*

---

## Interests

Enthusiastic about researches and studies related to statistics, data analytics, databases management and graphic design