

# Runchen Li

Stony Brook University - 100 Nicolls Road, Stony Brook, NY 11794, USA.

## EDUCATION

Stony Brook University & Anhui University  
Bachelor of Science, Physics & Mathematics  
GPA: 3.81

Expected Degree in June. 2025  
Stony Brook, New York, United States

## SKILLS AND CERTIFICATIONS

- Can use 'Labview' to design to simulate test, measurement and control applications.
- Can use 'Origin' to analyze, visualize data and draw graphs.
- Can use Sputter and Ebeam to grow thin film.
- Can make 2D crystal material stacks.
- Can use the AFM to scan the surface of the atom.
- Can use the TEM to observe and analyze the nature and behavior of nanoparticles, nanomaterials and nanostructures.
- Can use Muffle furnace to calcine materials.
- Can use 'Python' to do data analysis and algorithms.
- Can use 'Keil' to code microcontroller hardware program.
- Can use 'NanoScope Analysis' to visualize data and make graphs.
- Can use 'Matlab' to analyze the data and make data visualization.
- Can use HTML to build website.

## INTERNSHIP EXPERIENCE

### Professor XuDu's research group at Stony Brook University

June. 2023 - Now

S-226, Physics Building, Stony Brook University

Stony Brook, New York

- Stacking two-dimensional materials and graphene in different combinations.
- hBN and graphene in the same orientation to study various physical properties of their moiré spots produced under stress.
- Use AFM to scan the surface of the atom.
- Use TEM to observe and analyze the nature and behavior of nanoparticles, nanomaterials and nanostructures.

### Prof. Xiaoming Zhang's BOA algorithm research group at Anhui University

November. 2022 - January 2024

College of Physical Sciences, Anhui University

Heifei, Anhui, China

- Using Python to Simulate the Distribution of Aquatic Algae Plants.
- Involved in physical analysis and modeling of aquatic algae plants.

### Professor Xuegang Chen's research group using Labview to complete the magnetoelectric transport program

November. 2022 - November 2023

Heifei, Anhui, China

- Self-learning Labview software to complete the programming of data acquisition system.

### Research project on home external environment analysis system by Professor Lei Zhang of Anhui University

October. 2021 - May 2023

College of Computer Information Science, Anhui University

Heifei, Anhui, China

- Microcontroller circuit and sensor circuit design.
- Data reception platform design and hardware detection logic coding.
- Real-world experiments and using Origin to analyze data.
- Setting alarm thresholds and prediction algorithm design.

### Professor Xegang Chen's Sputter NCO research group at Anhui University.

June. 2022 - September. 2022

Laboratory 115, College of Physics and Optoelectronics, Anhui University

Hefei, Anhui, China

- Cutting and cleaning silicon wafers.
- Using Sputter to grow NCO thin film.
- Measurement of film properties using a muffle furnace and magnetoelectric transport device.
- Using Origin and NanoScope Analysis to analyze Data.

## **RELEVANT EXPERIENCE**

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**Stony Brook Institute at Anhui University :**

**Director of academic style construction of the league organization**

May. 2022- May. 2023

*Heifei, Anhui, China*

- Use excel sheets to process data and organize learning activities.
- Find resources, contact teachers, arrange academic lectures and various science and technology innovation and research competitions.

## **TECHNICAL PROFICIENCY**

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Language: English (Fluent), Mandarin Chinese (Native)

Software: Overleaf (LaTex), WPS, Labview, Origin, Matlab, keil, NanoScope Analysis, Pycharm(Python), Adobe Photoshop, Adobe Premiere, Adobe Audition,