

# Jietian Liu

[✉ jielian@umich.edu](mailto:jielian@umich.edu) [📍 Ann Arbor, MI](#) [🎓 Google Scholar](#) [👤 jliu879](#) [🔗 jielian-liu-65612b214](#)

## Education

---

**University of Michigan-Ann Arbor**, Electrical and Computer Engineering

- Research in robust regret-optimal control and preview control

Ann Arbor, MI

2022 – 2027

**University of Wisconsin-Madison**, Applied Mathematics, Engineering, and

Physics

- Research about Nitrogen-vacancy center

Madison, WI

2019 – 2021

## Publications

---

### Zur Elektrodynamik bewegter Körper

It concerned an interpretation of the Michelson–Morley experiment and the properties of light and time. Special relativity incorporates the principle that the speed of light is the same for all inertial observers regardless of the state of motion of the source.

Albert Einstein

[en.wikisource.org/wiki/Translation:On\\_the\\_Electrodynamics\\_of\\_Moving\\_Bodies](https://en.wikisource.org/wiki/Translation:On_the_Electrodynamics_of_Moving_Bodies)

### Über einen die Erzeugung und Verwandlung des Lichtes betreffenden heuristischen Gesichtspunkt

In the second paper, he applied the quantum theory to light to explain the photoelectric effect. In particular, he used the idea of light quanta (photons) to explain experimental results, but stressed the importance of the experimental results. The importance of his work on the photoelectric effect earned him the Nobel Prize in Physics in 1921.

Albert Einstein

[de.wikisource.org/wiki/%C3%9Cber\\_einen\\_die\\_Erzeugung\\_und\\_Verwandlung\\_des\\_Lichtes\\_betreffenden\\_heuristischen\\_Gesichtspunkt](https://de.wikisource.org/wiki/%C3%9Cber_einen_die_Erzeugung_und_Verwandlung_des_Lichtes_betreffenden_heuristischen_Gesichtspunkt)

### Die Grundlage der allgemeinen Relativitätstheorie

The publication of the theory of general relativity made him internationally famous. He was professor of physics at the universities of Zurich (1909–1911) and Prague (1911–1912), before he returned to ETH Zurich (1912–1914).

Albert Einstein

[de.wikisource.org/wiki/Die\\_Grundlage\\_der\\_allgemeinen\\_Relativit%C3%A4sttheorie](https://de.wikisource.org/wiki/Die_Grundlage_der_allgemeinen_Relativit%C3%A4sttheorie)

## Skills

---

### Physics

## Languages

---

### German

Native speaker

### English

Fluent

## Projects

---

### Quantum Computing

Quantum computing is the use of quantum-mechanical phenomena such as superposition and entanglement to perform computation. Computers that perform quantum computations are known as quantum computers.

Jan 2018 – Jan 2018

- Quantum Teleportation
- Quantum Cryptography