



Joonhee Choi

Assistant Professor of Electrical Engineering

CONTACT INFORMATION

- **Administrative Contact**

Nyein Su Mon

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Bio

BIO

Joonhee Choi is an Assistant Professor of Electrical Engineering at Stanford University. Joonhee received his Ph.D. and master's from Harvard University, as well as master's and bachelor's degrees from Korea Advanced Institute of Science & Technology. Prior to joining Stanford, he worked as an IQIM postdoctoral fellow at the Institute for Quantum Information and Matter (IQIM) at Caltech. Joonhee's research focus has been on engineering the dynamics of quantum many-body systems for both exploring fundamental science and demonstrating practical quantum applications. Throughout his career, he has worked in a wide variety of fields, including nonlinear nano-optics, ultrafast phenomena, solid-state and atomic physics, as well as quantum many-body physics. His expertise extends to practical applications in quantum metrology, communication, and information processing.

ACADEMIC APPOINTMENTS

- Assistant Professor, Electrical Engineering

HONORS AND AWARDS

- Terman Fellowship, Stanford University (2023)
- Outstanding Young Researcher Award, The Association of Korean Physicists in America (2021)
- IQIM Postdoctoral Fellowship, Caltech (2019-2022)
- Samsung Fellowship, Samsung (2013-2018)

PROFESSIONAL EDUCATION

- IQIM fellow, Caltech, Institute for Quantum Information and Matter (2022)
- PhD, Harvard University, Applied Physics (2019)
- AM, Harvard University, Physics (2015)
- BS/MS, KAIST, Mechanical Engineering (2010)

LINKS

- Group website: <https://choilab.stanford.edu/>
- Publications on Google Scholar: <https://scholar.google.com/citations?user=qy44cKQAAAAJ&hl=en>

Teaching

COURSES

2023-24

- Applied Quantum Mechanics I: EE 222, MATSCI 201 (Aut)
- Introduction to Photonics: EE 134 (Win)
- Quantum Control and Engineering: EE 224 (Spr)

2022-23

- Quantum Control and Engineering: EE 224 (Spr)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Rachel Barcklay, Hannah Kleidermacher, Erik Porter, Joshua Yang

Postdoctoral Faculty Sponsor

Tsz Him Leung

Master's Program Advisor

Fyyaz Khan