

# Jubayer Ibn Hamid

*jubayer@stanford.edu*

<https://jubayer-hamid.github.io/>

## Education

### Stanford University

BS in Mathematical Physics

Ms in Computer Science

CA, USA

*Sept, 2019- Dec, 2023*

*Jan, 2024 - Present*

## Experience

### Stanford Artificial Intelligence Laboratory

*Researcher (IRIS Lab)*

Focus:

Representation Learning in vision-language models and generative models, offline reinforcement learning.

CA, USA

*Jan, 2023 - Present*

### Stanford Applied Physics

*Researcher (Stanford LIGO Group)*

Focus:

Designing reduced thermal noise coatings for LIGO using material character characterizations for amorphous thin films.

CA, USA

*June, 2022 - Sept, 2022*

### Kavli Institute for Particle Astrophysics and Cosmology

*Researcher*

Focus:

Designing novel conic-shell cavities for axion detection

CA, USA

*June, 2021 - Sept, 2021*

## Publications (\* denotes co-first authorship)

Kyle Hsu\*, **Jubayer Ibn Hamid\***, Kaylee Burns, Chelsea Finn, Jiajun Wu. Tripod: Three Complementary Inductive Biases for Disentangled Representation Learning. *International Conference on Machine Learning (ICML)* 2024. <https://arxiv.org/abs/2404.10282>

Kaylee Burns, Zach Witzel, **Jubayer Ibn Hamid**, Tianhe Yu, Chelsea Finn, Karol Hausman. What Makes Pre-trained Visual Representations Successful for Robust Manipulation. *arXiv preprint*, 2023. <https://arxiv.org/pdf/2312.12444.pdf>

## Relevant Coursework

**Computer Science:** Reinforcement Learning, Natural Language Processing with Deep Learning, Deep Generative Models, Machine Learning, Deep Learning, Artificial Intelligence.

**Mathematics:** Algebraic Geometry, Abstract algebra (group theory, ring theory, representation theory, module theory), differential topology, real analysis, complex analysis, differential geometry, convex optimization.

**Physics:** Quantum Field Theory, Quantum Mechanics, Lagrangian/Hamiltonian Mechanics, Statistical Mechanics, Electrodynamics.