

Jeremy Klotz

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EDUCATION

Columbia University

Ph.D. in Computer Science

Advisor: Shree K. Nayar

New York, NY

Expected 2028

Carnegie Mellon University

B.S., M.S. in Electrical and Computer Engineering

Advisor: Aswin C. Sankaranarayanan

GPA: 4.00 / 4.00, University Honors

Pittsburgh, PA

May 2022

FELLOWSHIPS AND AWARDS

NSF Perfect Pitch Competition, 2nd Place	2026
Andrew P. Kosoresow Memorial Award for Excellence in Teaching and Service, <i>Columbia University</i>	2026
Best Paper Award, ECCV (1 of 2,387 accepted papers)	2024
National Defense Science and Engineering Graduate (NDSEG) Fellowship	2023–2026

SELECTED PUBLICATIONS

Papers

- [1] **Jeremy Klotz** and Shree K. Nayar, “An Eternal Irradiance Camera,” *SIGGRAPH Asia*, 2026.
- [2] Francesco Pasti, **Jeremy Klotz**, Nicola Bellotto, and Shree K. Nayar, “Minimalist Visual Inertial Odometry,” *IEEE Robotics and Automation Letters (RA-L)*, 2026.
- [3] **Jeremy Klotz** and Shree K. Nayar, “Forecasting Solar Energy Using a Single Image,” *Solar Energy*, 2026.
- [4] **Jeremy Klotz** and Shree K. Nayar, “Minimal Sensing for Orienting a Solar Panel,” *Solar Energy*, 2025.
- [5] **Jeremy Klotz** and Shree K. Nayar, “Minimalist Vision with Freeform Pixels,” *European Conference on Computer Vision (ECCV)*, 2024. **Best Paper Award.**
- [6] Shree K. Nayar, **Jeremy Klotz**, Nikhil Nanda, and Mikhail Fridberg, “Cricket: A Self-Powered Chirping Pixel,” *ACM Transactions on Graphics (SIGGRAPH)*, 2024.
- [7] **Jeremy Klotz**, Mohit Gupta, and Aswin C. Sankaranarayanan, “Computational 3D Imaging with Position Sensors,” *International Conference on Computer Vision (ICCV)*, 2023. **Oral Presentation.**
- [8] **Jeremy Klotz**, Vijay Rengarajan, and Aswin C. Sankaranarayanan, “Fine-Grain Prediction of Strawberry Freshness Using Subsurface Scattering,” *ICCV Workshop on Large-Scale Fine-Grained Food Analysis (Large-FineFoodAI)*, 2021.

Datasets

- [D1] **Jeremy Klotz** and Shree K. Nayar, “*UrbanSky*: A Dataset of Outdoor HDR Lighting Environments,” cave.cs.columbia.edu/repository/UrbanSky.

INVITED TALKS

- “Minimalist Vision,” *University of Osaka*, hosted by Hajime Nagahara April 2026
- “Minimalist Vision,” *Kyoto University*, hosted by Ko Nishino April 2026

TEACHING

Teaching Assistant, *Columbia University*

First Principles of Computer Vision

Fall 2022, 2023, 2024, 2026

Computational Imaging

Spring 2024, 2025, 2026

SERVICE

Reviewer: SIGGRAPH Asia, International Journal of Computer Vision (IJCV)

SELECTED PRESS

“Forecasting solar irradiance in urban environments with just one 360° image,” *PV Magazine* 2026

“Is that Solar Panel Pointing in the Right Direction?” *Columbia Engineering* 2026

“Excuse me, is that solar panel pointing in the right direction?” *Tech Xplore* 2026

INDUSTRY EXPERIENCE

Research Intern, *Metron*

Summer 2021

Vision algorithms for synthesizing synthetic aperture sonar imagery and training object detection models

LEADERSHIP

Carnegie Mellon University Emergency Medical Service

2018–2022

Captain and Supervisor (2021–2022)