

# Deep Learning for Graphics

# (Subset for CS535)

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## From lightfields to NERFs...



#### **NeRF:** Representing Scenes as Neural Radiance Fields for View Synthesis





Fig. 1. The NeRF volume rendering and training process. Image sourced from [1]. (a) illustrates the selection of sampling points for individual pixels in a to-be-synthesized image. (b) illustrates the generation of densities and colors at the sampling points using NeRF MLP(s). (c) and (d) illustrate the generation of individual pixel color(s) using in-scene colors and densities along the associated camera ray(s) via volume rendering, and the comparison to ground truth pixel color(s), respectively.

https://www.matthewtancik.com/nerf

### **NeRF:** Representing Scenes as Neural Radiance Fields for View Synthesis



Lots more:

<u>https://github.com/awesome-NeRF/awesome-NeRF?tab=readme-ov-file</u>