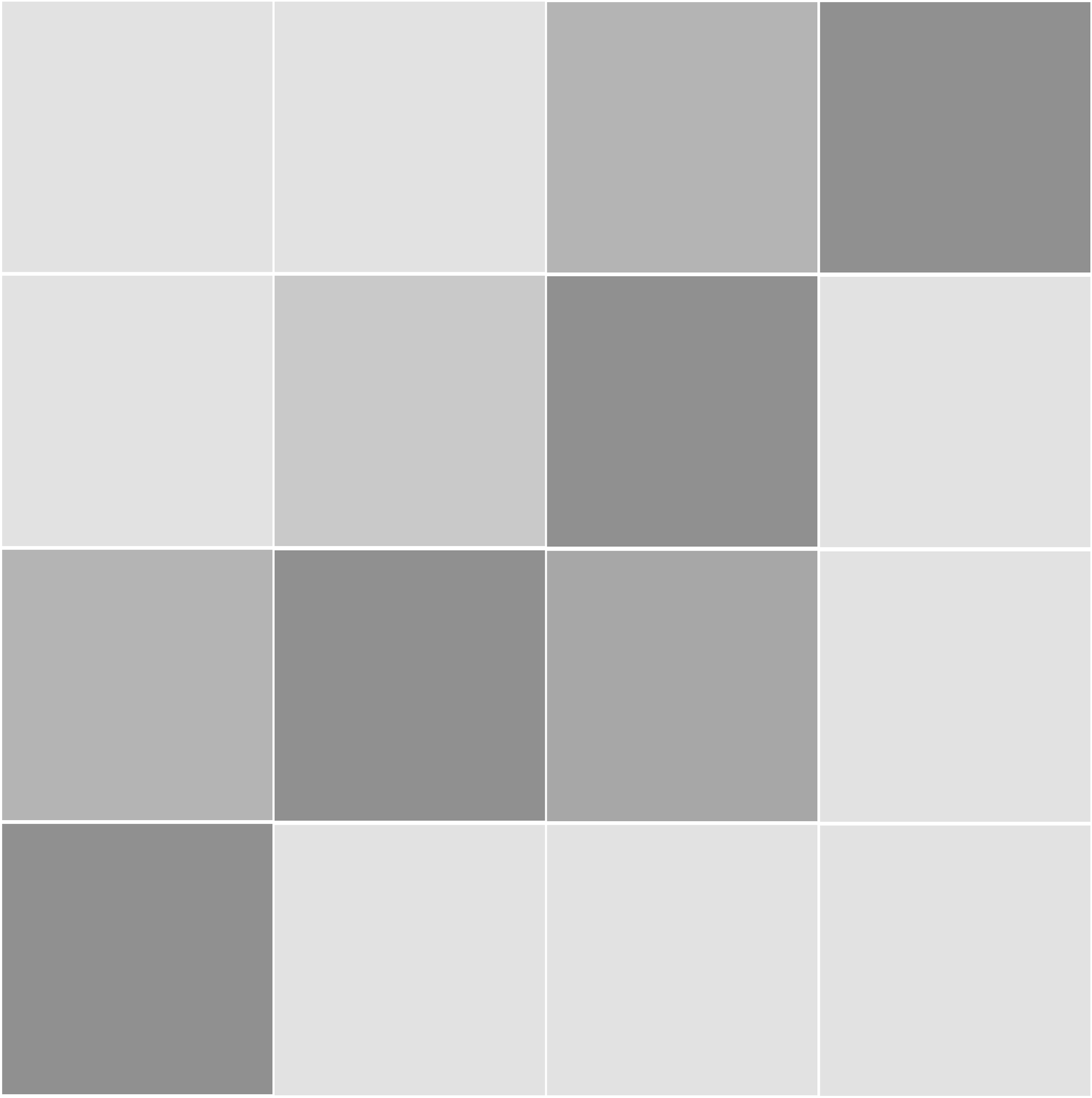
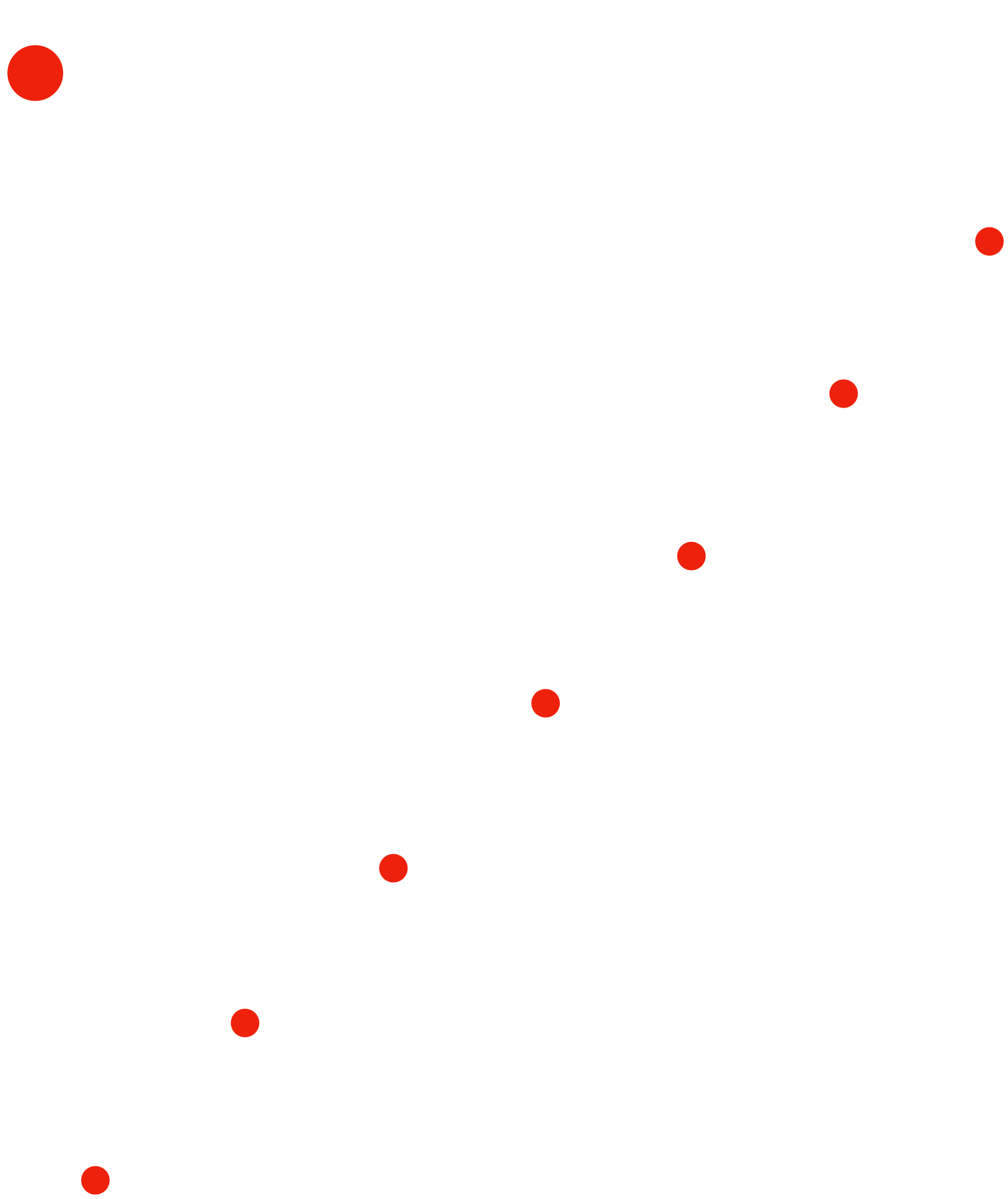
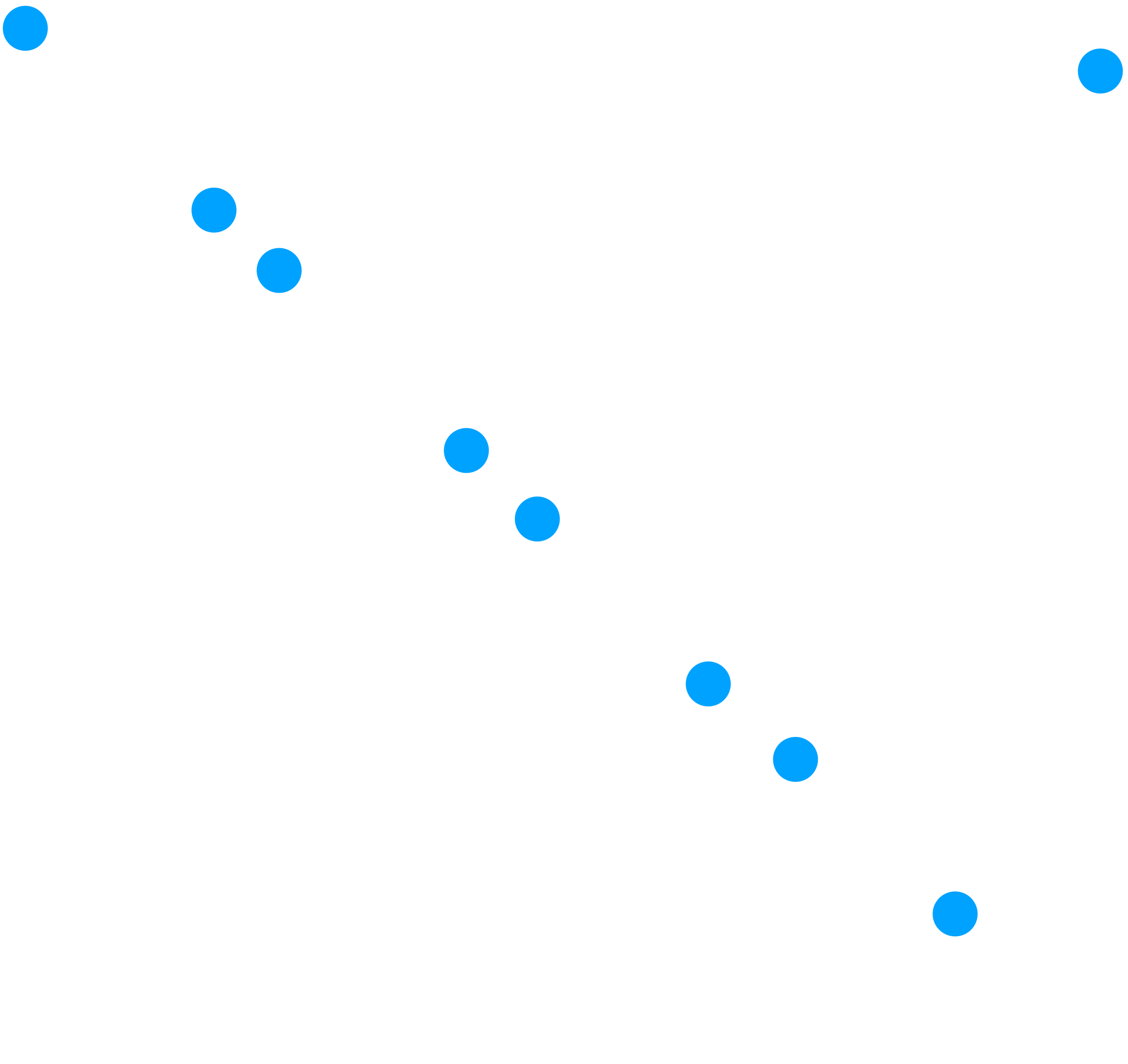


Siddon's Method

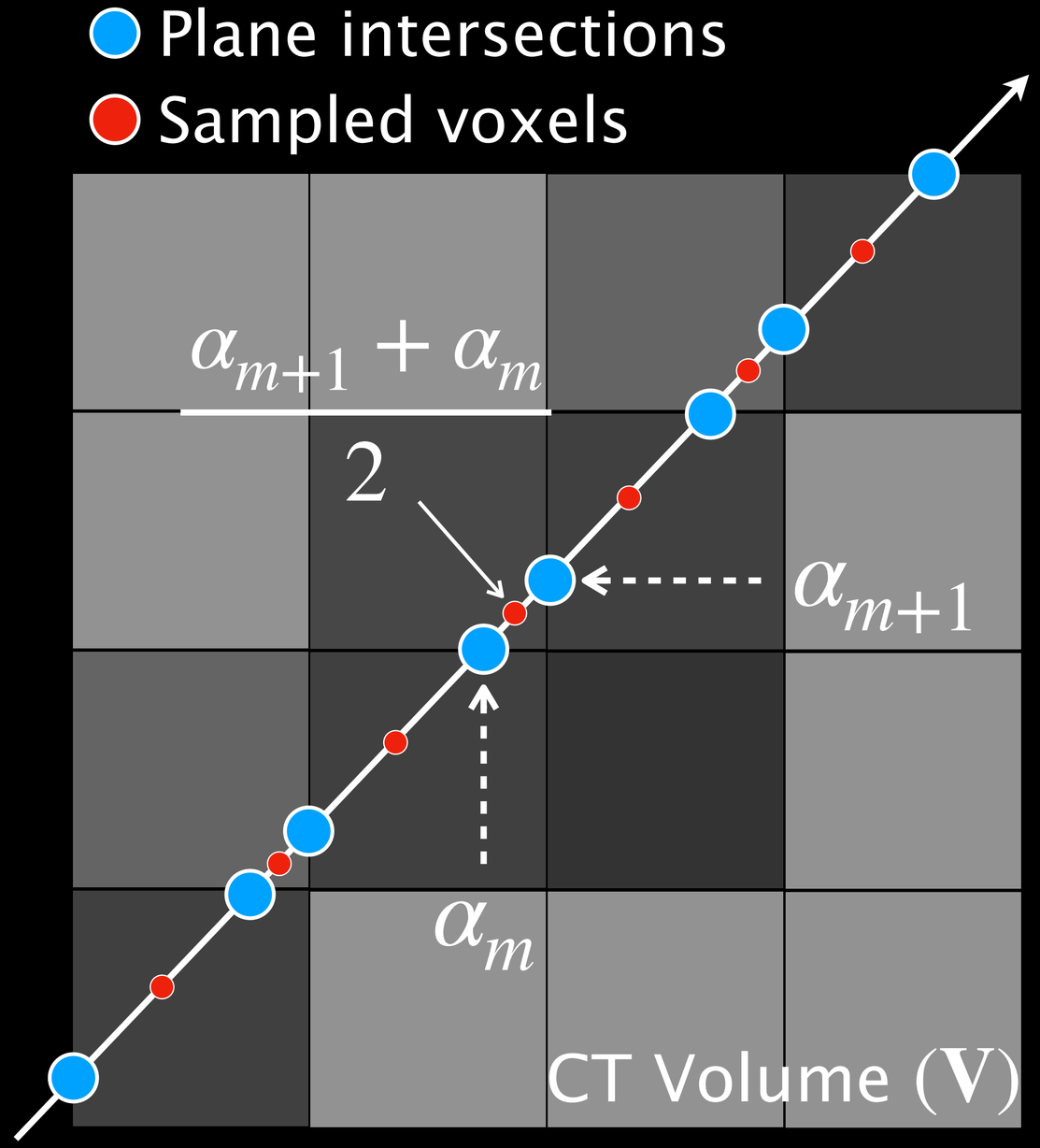




Siddon's Method

Convert ray to pixel intensity

- Calculate intersection length of the ray with each voxel
- Get the intensities of the intersected voxels
- Compute a weighted sum



Siddon. "Fast calculation of the exact radiological path for a three-dimensional CT array." Medical Physics, 1985.

Making Siddon's method auto-differentiable

Reformulate as an analytical function of the 3D pose