## **LEARNING OBJECTIVES – Lecture 9 (Generative Adversarial Networks III)**

After attending lecture and completing the associated readings, you should be able to:

- 1. Derive the Kantorovich-Rubinstein duality in optimal transport theory
- 2. Discuss f-GANs
- 3. Describe GANs in the robust statistics framework
- 4. Discuss novelty-quality tradeoffs in creativity
- 5. Discuss ways that have been proposed to assess the performance of generative algorithms, especially GANs which only have implicit density estimation, and how this is related to interpolative and extrapolative generation