

CS 7150: Deep Learning — Summer-Full 2020 — Paul Hand

Week 12 — Preparation Questions For Class

Due: Monday July 27, 2020 at 12:00 PM Eastern time via [Gradescope](#)

Name: [Put Your Name Here]

Collaborators: [Put Your Collaborators Here]

You may consult any and all resources in answering the questions. Your goal is to have answers that are ready to be shared with the class (or on a hypothetical job interview) as written. **Make sure to tag each question when you submit to Gradescope.**

Directions: Read the article '[Density estimation using Real NVP](#)'.

Question 1. *Compare and contrast RealNVP with VAEs and GANs.*

Response:

Question 2. *Explain how the RealNVP is invertible, even though it depends on convolutional neural networks, which in general are not invertible.*

Response:

Question 3. *Explain the multiscale architecture of the RealNVP.*

Response:

Question 4. *Is training an invertible network like RealNVP a supervised or an unsupervised machine learning problem?*

Response:

Question 5. *How does the RealNVP ensure that any input component can affect every output component?*

Response: