Kernel Autoencoders

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Abstract—**Kernel Autoencoders**

Index Terms—**Kernel**

TO DO LIST

- Make the model variational, hence generative
- Improve the performance
  - Improve the time complexity
  - Is the model actually solvable analytically?
- Study various datasets:
  - mnist
  - fashion-mnist
  - qm7x
- Any connection to deep gaussian processes?
  - Deep Gaussian processes tutorial
  - Book
  - Intro to Gaussian Processes
  - Autoencoders?
- Insist on molecules? Separate paper?
  - Autoencoder for efficient molecular representation
  - Build generative model
- Use quantum circuit to evaluate the kernels, separate paper?
- Document the code much better
- Hyperparameters tuning with grid search or Metropolis-Hastings

I. INTRODUCTION

ACKNOWLEDGMENT

REFERENCES

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