Data Mining & Machine Learning

ARIZONA STATE UNIVERSITY

SentiGAN: Generating Sentimental Texts via Mixture Adversarial Networks

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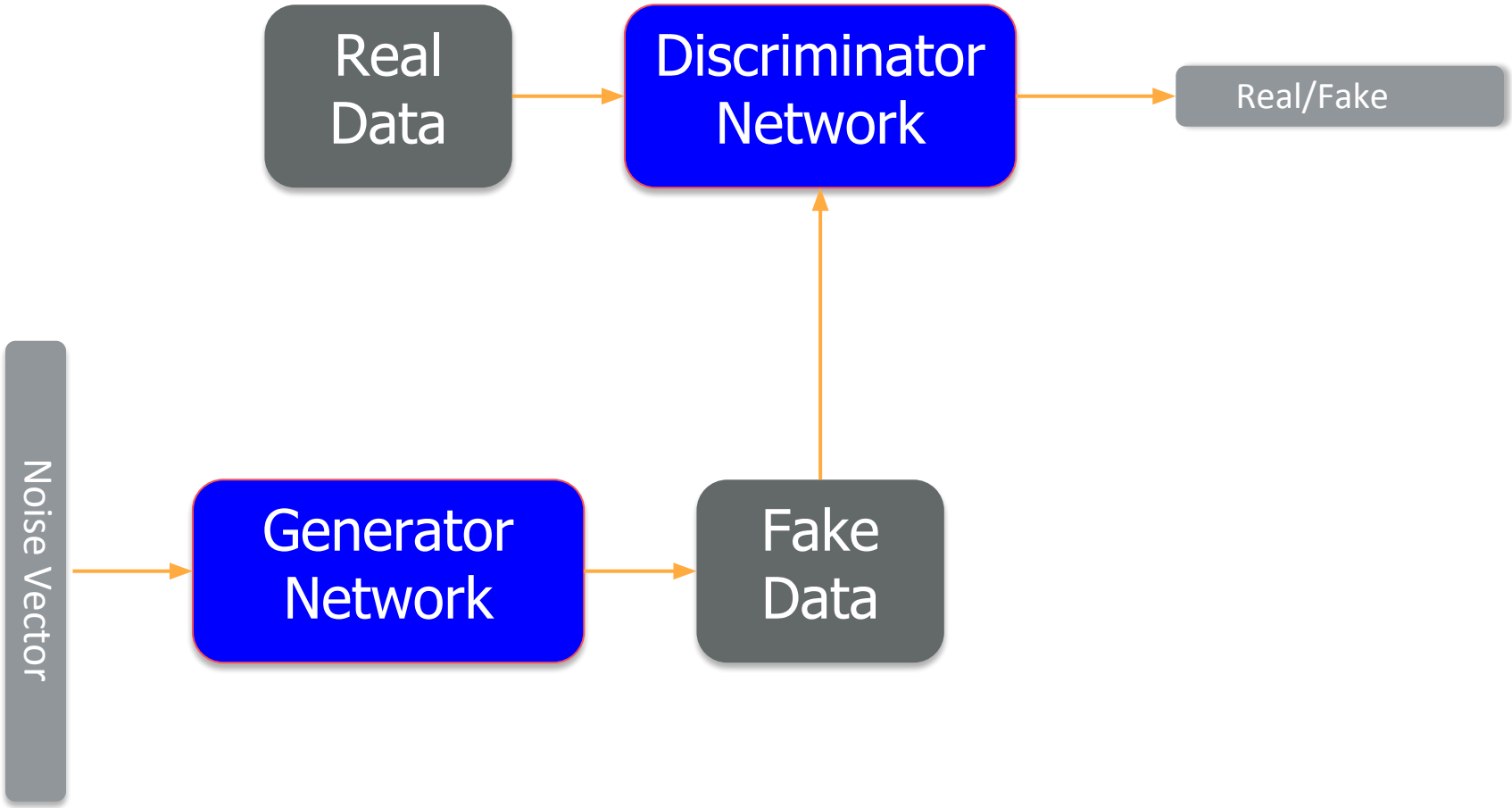
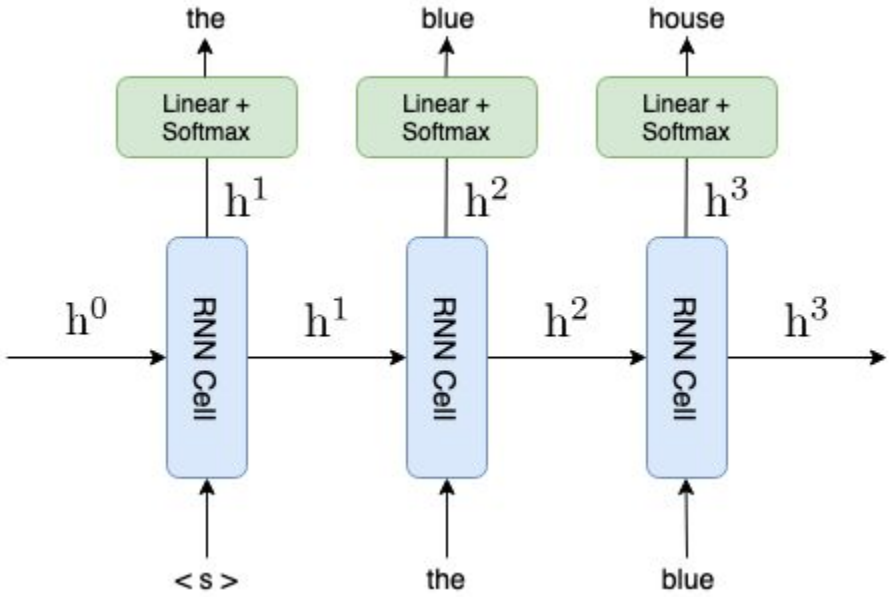
Generative Adversarial Networks



Use GAN for Text Generation

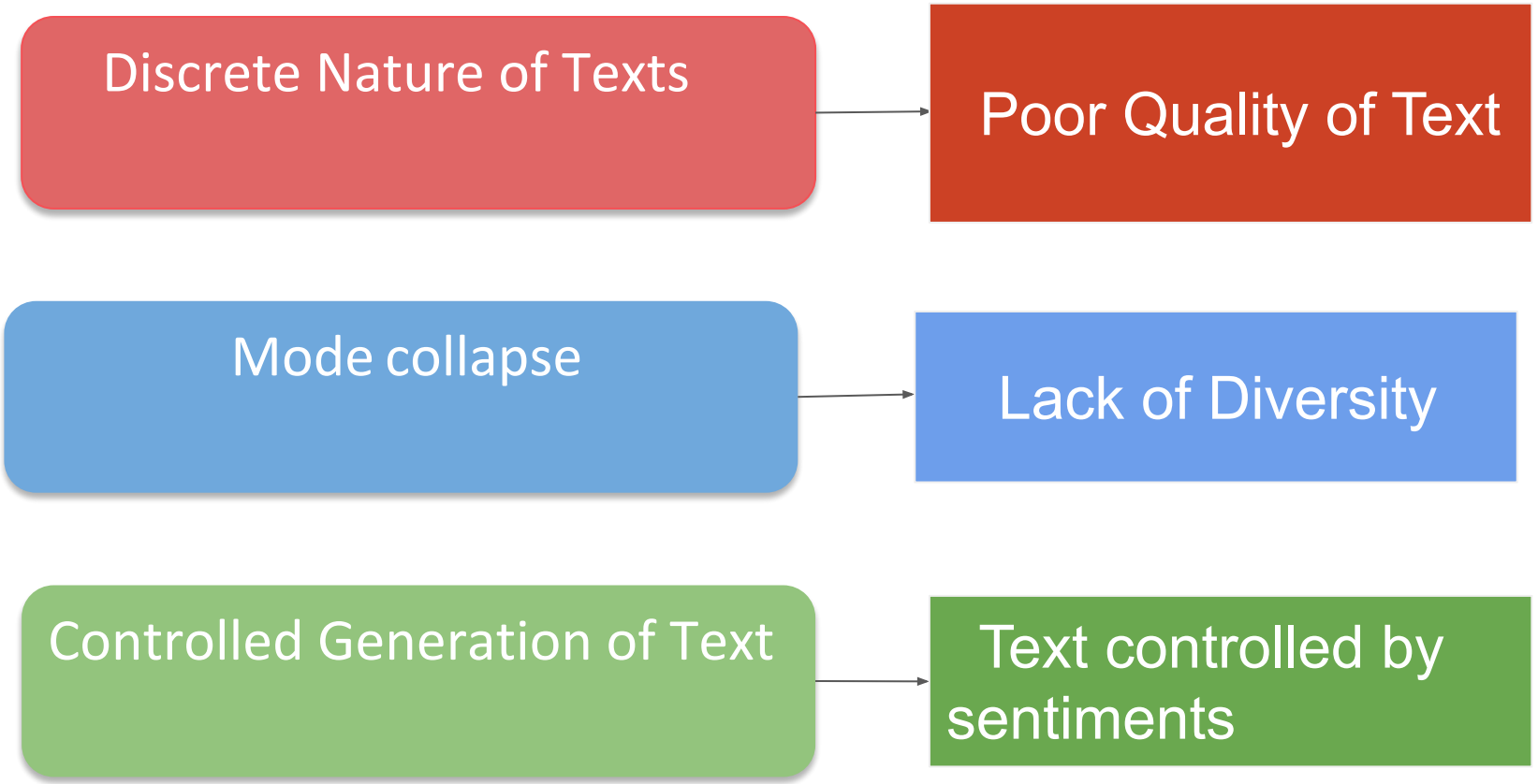
- **Generator:** LSTM or GRU based text generation



- **Discriminator:** a simple CNN-based classifier or multi-layer perceptron

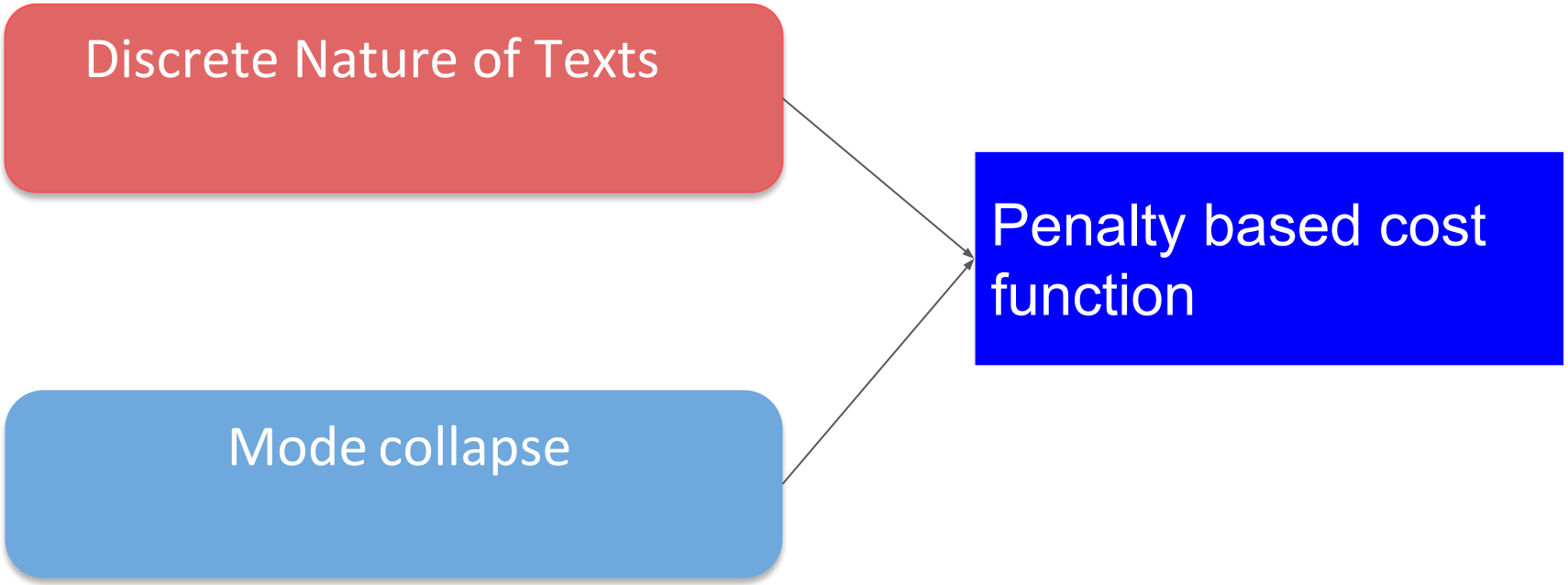
GAN's for Text Generation (Cont'd)

Some problems of using GAN's with text:-



SentiGAN

Solutions to the problems:-



SentiGAN(Contd)

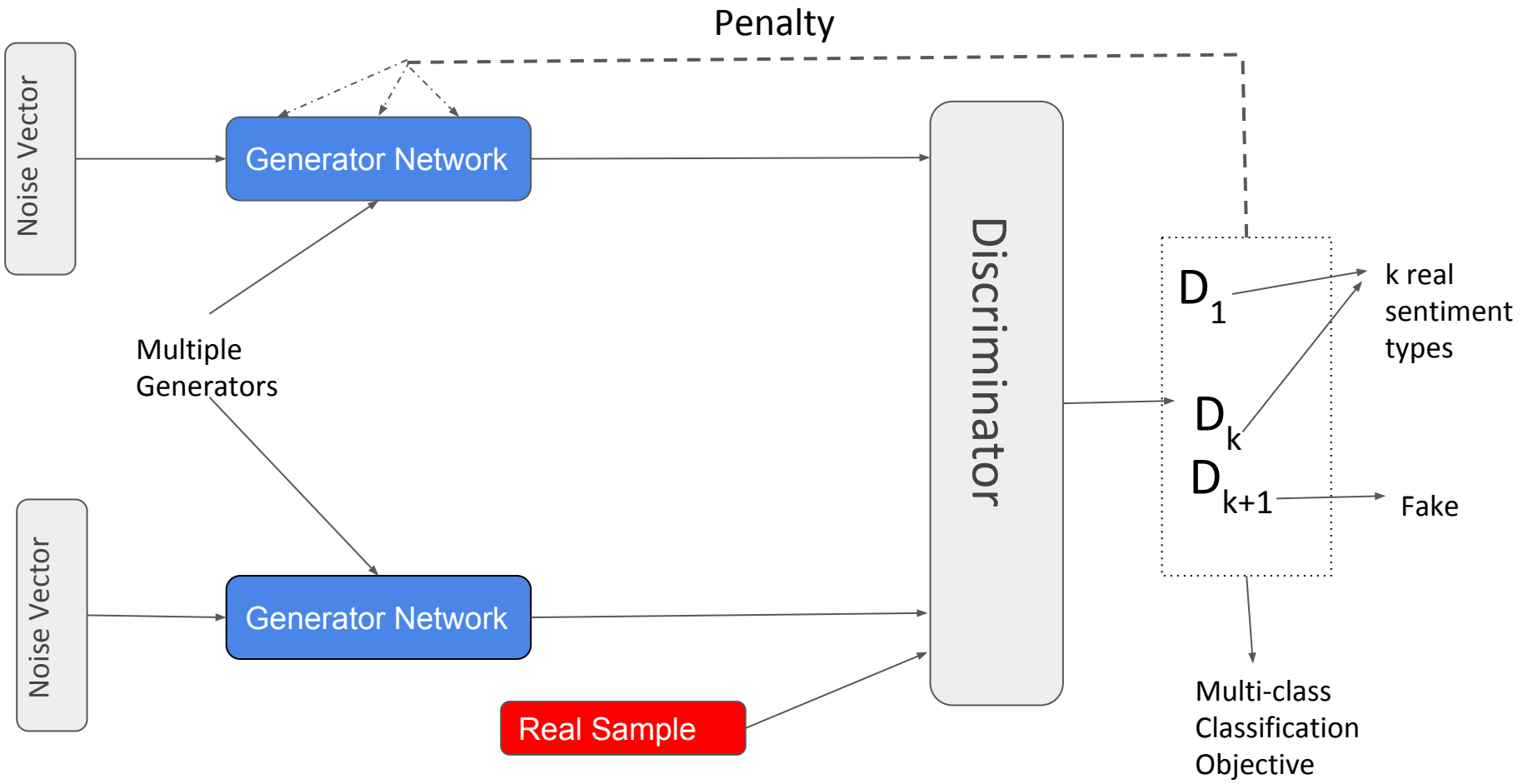
Solutions continued:-

Text Controlled By Sentiments

- Multiple Generators
- One generator for each sentiment

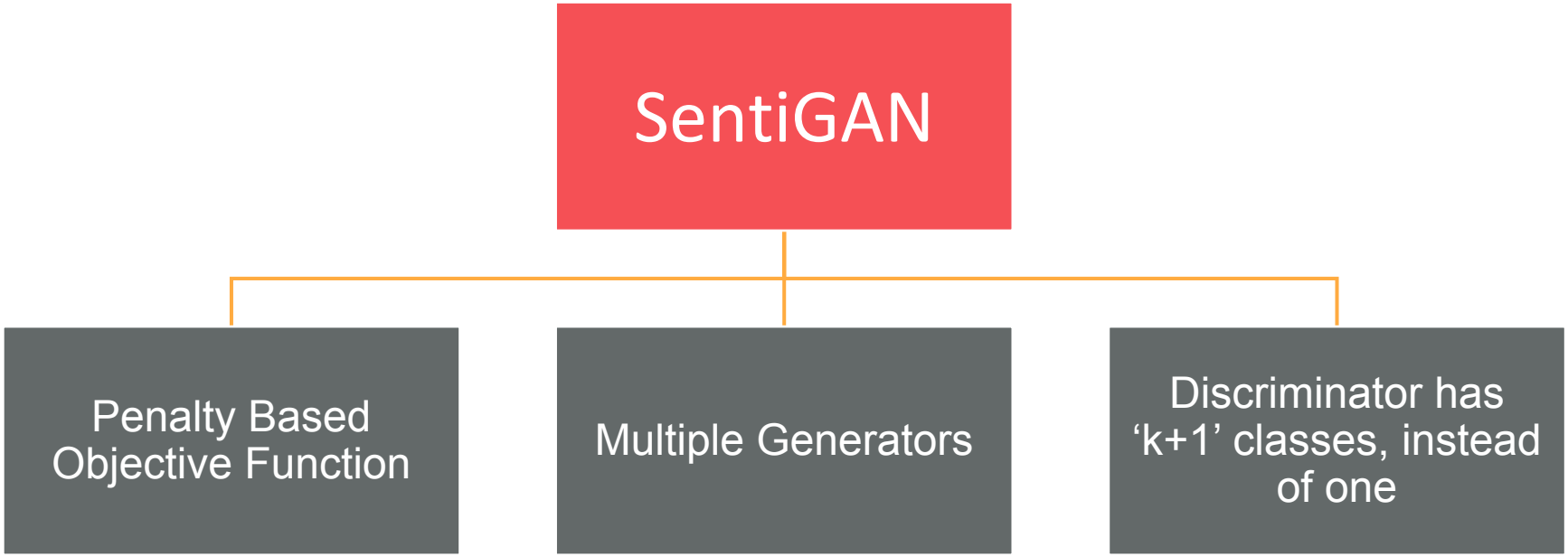
- Discriminator with k+1 classes
- k classes for sentiments

SentiGAN(Contd)



Conclusion

- Contributions:



Questions