

1. **Method 1: By using a heterogeneous autoencoder and a lookup table in the fair abstract compression stage;**

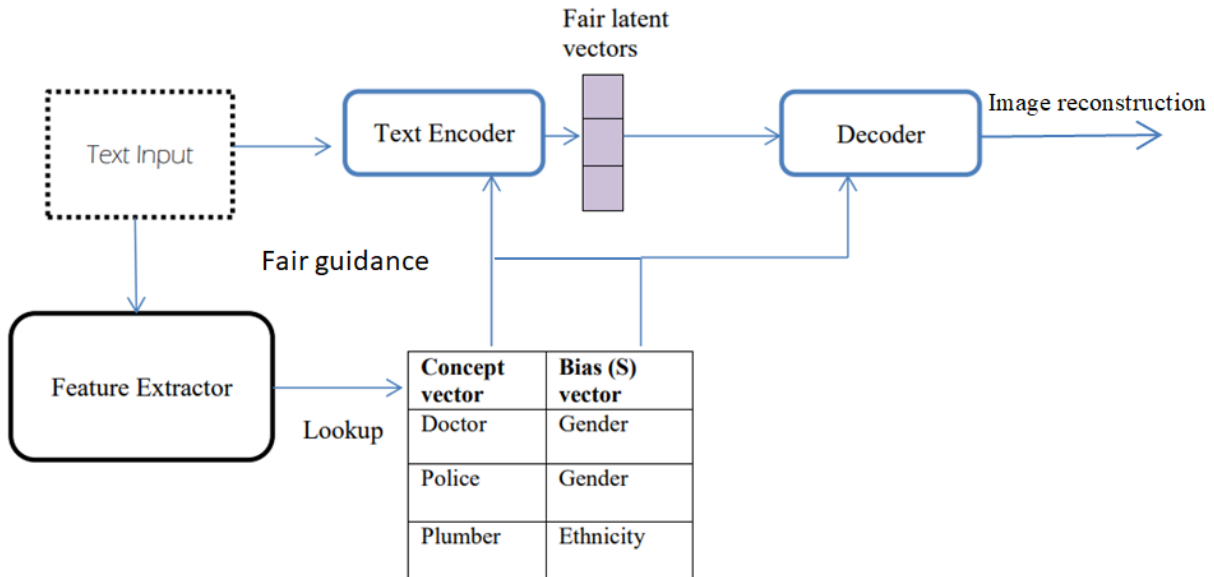


Figure 1: Fair abstract compression

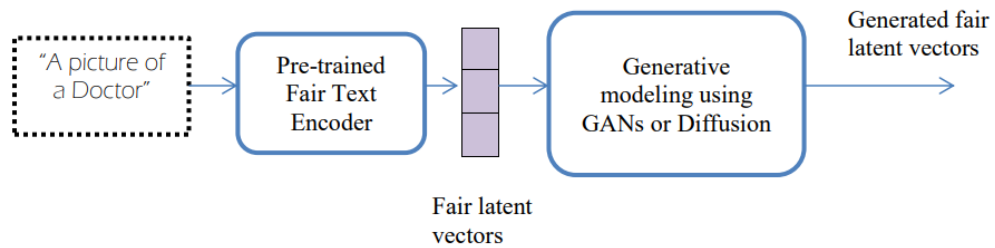


Figure 2: Generative modelling

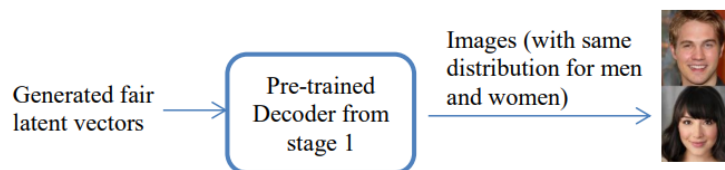


Figure 3: High fidelity reconstruction

Method 2: By providing an additional fair text encoding module after the generative modeling of FLDGM

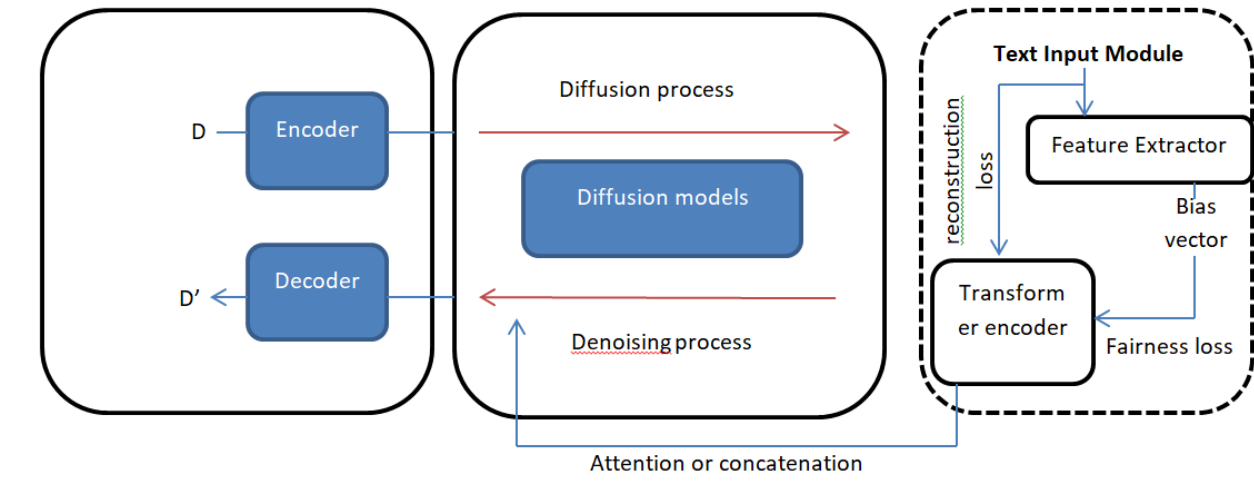


Figure 3: A design of method 2