Enhancer probability

σ

Dense Layer

The first time step

Sum

The last time step

Gating Layer

X X X

Softmax

tanh tanh tanh

Dense Dense Dense

Bidirectional LSTM Layer

Concatenate Concatenate Concatenate

919 Epigenetic Features 919 Epigenetic Features 919 Epigenetic Features

Dense Layer

Pretrained Model

Concatenate

Time Distributed

Dense Layers

Max Pooling

Conv1D

kernels:patterns

A G C T

Input sequence