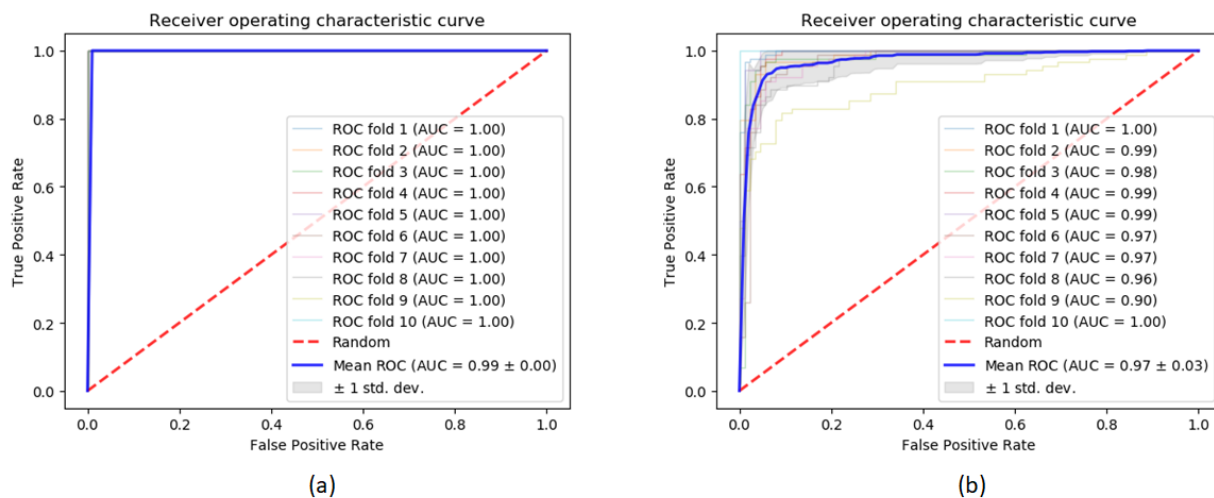
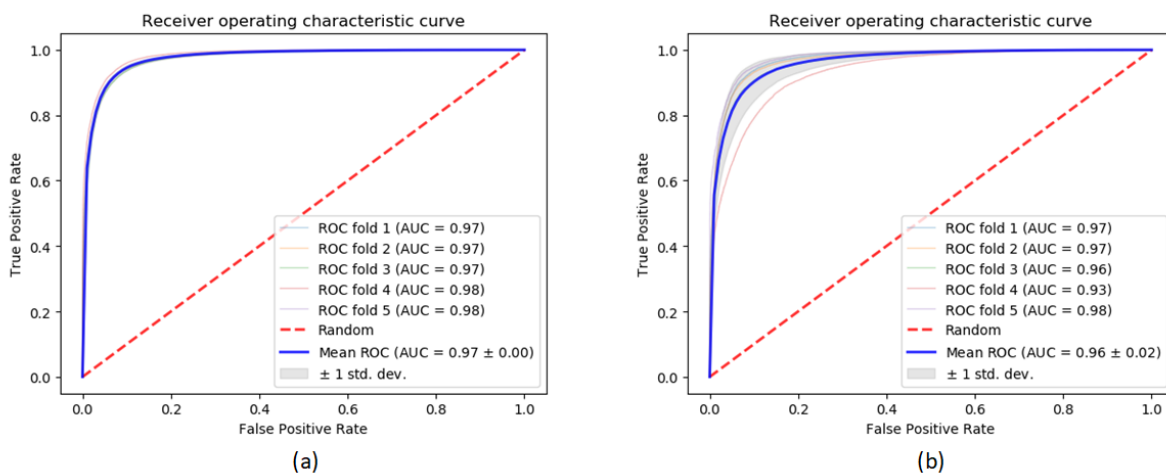


## Supplementary Materials

### 1 Supplementary Figures



**Figure S1.** ROC curves of SNNRice6mA on training set and validation set of 6mA-rice-Chen dataset. (a) The performance on the training set. (b) The performance on the validation set.



**Figure S2.** ROC curves of SNNRice6mA on training set and validation set of 6mA-rice-Lv dataset. (a) The performance on the training set. (b) The performance on the validation set.

## Gateway Timeout

The gateway did not receive a timely response from the upstream server or application.

*Apache/2.4.7 (Ubuntu) Server at thegleelab.org Port 80*

Figure S3 Error message when using the SDM6A tool on 6mA-mouse-Feng dataset (<http://thegleelab.org/SDM6A/index.html>).

### NOTE:

Due to lack information for the front and rear 20nt of a sequence, just give the position of 'A' sites with no prediction:

Figure S4 Error message when using the iDNA6mA-Rice tool on 6mA-mouse-Feng dataset (<http://lin-group.cn/server/iDNA6mA-Rice/service.html>).

## 2 Supplementary Tables

Table S1 Hyper-parameters of SNNRice6mA

Hyper-parameter	Value
Number of filters	16
Kernel size of filter	4
Number of groups in GN layer	4
Regularization rate	0.0001
Dropout rate	0.25
Hidden units in FC layer	32
Learning rate	0.005
Momentum rate	0.95
Batch size	32

Table S2 Performance of SNNRice6mA on 6mA-rice-Chen dataset

Metric	Training set	Validation set	Testing set
Sensitivity (%)	$99.94 \pm 0.09$	$92.84 \pm 6.14$	$92.16 \pm 5.76$
Specificity (%)	$99.99 \pm 0.04$	$93.75 \pm 3.22$	$94.32 \pm 2.87$
Accuracy (%)	$99.96 \pm 0.07$	$93.30 \pm 4.10$	$93.24 \pm 3.71$
MCC	$1.00 \pm 0.00$	$0.87 \pm 0.08$	$0.87 \pm 0.07$
AUC	$0.99 \pm 0.00$	$0.97 \pm 0.03$	$0.97 \pm 0.02$
Precision (%)	$99.99 \pm 0.04$	$93.68 \pm 3.21$	$94.19 \pm 2.92$
F1-Score (%)	$99.97 \pm 0.07$	$93.19 \pm 4.31$	$93.09 \pm 3.91$
Binary cross entropy Loss	$0.01 \pm 0.01$	$0.21 \pm 0.13$	$0.22 \pm 0.12$

Table S3 Performance of SNNRice6mA on 6mA-rice-Lv dataset

Metric	Training set	Validation set	Testing set
Sensitivity (%)	$94.01 \pm 0.41$	$93.68 \pm 0.36$	$93.67 \pm 0.41$
Specificity (%)	$90.66 \pm 0.52$	$86.18 \pm 6.05$	$86.74 \pm 3.93$
Accuracy (%)	$92.34 \pm 0.44$	$89.93 \pm 3.10$	$90.20 \pm 1.92$
MCC	$0.85 \pm 0.01$	$0.80 \pm 0.06$	$0.81 \pm 0.04$
AUC	$0.97 \pm 0.00$	$0.96 \pm 0.02$	$0.96 \pm 0.01$
Precision (%)	$90.96 \pm 0.49$	$87.40 \pm 4.61$	$87.71 \pm 3.07$
F1-Score (%)	$92.46 \pm 0.42$	$90.37 \pm 2.62$	$90.56 \pm 1.64$
Binary cross entropy Loss	$0.20 \pm 0.01$	$0.25 \pm 0.07$	$0.25 \pm 0.04$