

## LIST OF FIGURES

<b>Figure 2. 1</b> LSTM Cell .....	10
<b>Figure 2. 2</b> Bi-LSTM Cell .....	11
<b>Figure 2. 3</b> General Workflow.....	12
<b>Figure 3. 1</b> The proposed Framework .....	14
<b>Figure 3. 2</b> Kaggle Dataset .....	15
<b>Figure 3. 3</b> Kaggle Dataset .....	15
<b>Figure 3. 4</b> Data Scraping.....	16
<b>Figure 3. 5</b> Data preprocessing steps .....	17
<b>Figure 3. 6</b> Word2Vec Architecture .....	20
<b>Figure 3. 7</b> Bahdanau Attention Mechanism .....	22
<b>Figure 3. 8</b> Bahdanau Attention System.....	22
<b>Figure 4. 1</b> Preprocessing Result.....	25
<b>Figure 4. 2</b> Tweet Scraping .....	26
<b>Figure 4. 3</b> Scraping Result .....	26
<b>Figure 4. 4</b> Training and Testing LSTM.....	32
<b>Figure 4. 5</b> Training and Testing Bi-LSTM .....	38
<b>Figure 4. 6</b> Training and Testing LSTM Attention.....	43
<b>Figure 4. 7</b> Confusion Matrix LSTM.....	45
<b>Figure 4. 8</b> Confusion Matrix Bi-LSTM .....	45
<b>Figure 4. 9</b> Confusion Matrix LSTM Attention .....	46
<b>Figure 4. 10</b> Daily Distribution of Mental Health using LSTM Attention .....	46
<b>Figure 4. 11</b> Tweet Classification Results of Mental Health using LSTM Attention .....	50
<b>Figure 4. 12</b> Daily Distribution of Mental Health using LSTM .....	52
<b>Figure 4. 13</b> Daily Distribution of Mental Health using Bi-LSTM.....	54
<b>Figure 4. 14</b> Tweet Classification Results of Mental Health using Bi-LSTM .....	12