## Logistic Regression Binary Search Tree Confusion Matrix

## True Letter

|     |      |      |      |      |      |      |      |      |      |      |      |      | 114  | LCU  | CCI  |      |      |      |      |      |      |      |      |      |      |      |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|     | Α    | В    | С    | D    | E    | F    | G    | Н    | 1    | J    | K    | L    | М    | N    | 0    | Р    | Q    | R    | s    | Т    | U    | ٧    | W    | Х    | Υ    | Z    |
| Α   | 0.87 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.06 | 0    | 0    | 0    | 0.03 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| В   | 0    | 0.81 | 0.01 | 0.05 | 0.03 | 0.04 | 0.01 | 0.01 | 0.04 | 0    | 0.01 | 0.01 | 0    | 0    | 0    | 0.01 | 0.02 | 0.03 | 0.05 | 0.02 | 0    | 0    | 0    | 0.04 | 0    | 0.02 |
| С   | 0    | 0    | 0.71 | 0    | 0.01 | 0    | 0.1  | 0    | 0    | 0    | 0.04 | 0.01 | 0    | 0    | 0    | 0    | 0.02 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| D   | 0    | 0.02 | 0    | 0.7  | 0    | 0.04 | 0.01 | 0.03 | 0    | 0.01 | 0.01 | 0    | 0    | 0.01 | 0.01 | 0.05 | 0    | 0.03 | 0.02 | 0.01 | 0    | 0    | 0    | 0.02 | 0.01 | 0    |
| E   | 0    | 0    | 0.03 | 0    | 0.71 | 0.02 | 0.02 | 0    | 0    | 0.01 | 0    | 0.06 | 0    | 0    | 0    | 0    | 0.02 | 0    | 0    | 0.03 | 0    | 0    | 0    | 0.02 | 0.02 | 0.03 |
| F   | 0    | 0    | 0    | 0    | 0    | 0.72 | 0    | 0.04 | 0    | 0.01 | 0    | 0    | 0    | 0    | 0.01 | 0.07 | 0    | 0    | 0    | 0.01 | 0    | 0    | 0    | 0    | 0.05 | 0    |
| G   | 0    | 0.02 | 0.04 | 0    | 0.08 | 0.01 | 0.65 | 0.03 | 0    | 0    | 0.07 | 0.04 | 0    | 0    | 0.05 | 0.04 | 0.04 | 0.01 | 0.01 | 0.01 | 0    | 0.01 | 0    | 0.02 | 0    | 0    |
| н   | 0    | 0.02 | 0.04 | 0.02 | 0    | 0    | 0    | 0.4  | 0    | 0.02 | 0.01 | 0    | 0.04 | 0.03 | 0.1  | 0    | 0    | 0.03 | 0    | 0    | 0.04 | 0.01 | 0.01 | 0    | 0    | 0    |
| 1   | 0    | 0    | 0    | 0    | 0    | 0.02 | 0    | 0    | 0.82 | 0.03 | 0    | 0    | 0    | 0    | 0    | 0    | 0.01 | 0    | 0    | 0.03 | 0    | 0    | 0    | 0    | 0    | 0    |
| J   | 0.01 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.02 | 0.81 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.01 | 0    | 0    | 0    | 0    | 0    | 0    | 0.03 |
| к   | 0    | 0    | 0.09 | 0    | 0.03 | 0    | 0.01 | 0.02 | 0    | 0    | 0.64 | 0    | 0    | 0.02 | 0    | 0    | 0    | 0.05 | 0    | 0.01 | 0.03 | 0    | 0    | 0.02 | 0    | 0    |
| ㄴ[  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.01 | 0    | 0    | 0.8  | 0    | 0    | 0    | 0    | 0.01 | 0    | 0.05 | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| М   | 0.01 | 0    | 0    | 0    | 0    | 0    | 0    | 0.01 | 0    | 0    | 0    | 0    | 0.85 | 0    | 0    | 0    | 0    | 0.01 | 0    | 0    | 0.01 | 0    | 0.03 | 0    | 0    | 0    |
| N   | 0.01 | 0    | 0    | 0.02 | 0    | 0.01 | 0    | 0.17 | 0    | 0    | 0.01 | 0    | 0.01 | 0.89 | 0    | 0    | 0    | 0.02 | 0    | 0    | 0.02 | 0    | 0.01 | 0    | 0    | 0    |
| 0   | 0    | 0.01 | 0.03 | 0.02 | 0    | 0    | 0    | 0.07 | 0    | 0.02 | 0    | 0    | 0    | 0.01 | 0.64 | 0.01 | 0.07 | 0.02 | 0.04 | 0    | 0.08 | 0.01 | 0    | 0    | 0    | 0    |
| Р   | 0    | 0    | 0    | 0.09 | 0    | 0.04 | 0    | 0.01 | 0    | 0    | 0    | 0    | 0    | 0.01 | 0.02 | 0.77 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.01 | 0    |
| Q   | 0.01 | 0.01 | 0    | 0    | 0.01 | 0    | 0.08 | 0.04 | 0.02 | 0.03 | 0.01 | 0.04 | 0    | 0    | 0.05 | 0    | 0.69 | 0.02 | 0.02 | 0    | 0    | 0    | 0    | 0.02 | 0.02 | 0.01 |
| R   | 0    | 0.04 | 0    | 0.02 | 0.03 | 0    | 0.01 | 0.07 | 0    | 0    | 0.07 | 0    | 0.01 | 0    | 0.03 | 0    | 0    | 0.75 | 0.03 | 0.01 | 0    | 0.03 | 0    | 0    | 0    | 0.02 |
| s   | 0.03 | 0.03 | 0.02 | 0.03 | 0.04 | 0.06 | 0.05 | 0.01 | 0.06 | 0.05 | 0    | 0.02 | 0    | 0    | 0    | 0.01 | 0.04 | 0    | 0.63 | 0.03 | 0    | 0    | 0    | 0.07 | 0.04 | 0.16 |
| т   | 0    | 0    | 0.01 | 0    | 0    | 0.02 | 0    | 0.01 | 0    | 0    | 0    | 0    | 0    | 0    | 0.01 | 0    | 0    | 0    | 0    | 0.79 | 0.01 | 0    | 0    | 0.01 | 0.05 | 0    |
| U   | 0.02 | 0    | 0.01 | 0.04 | 0    | 0    | 0    | 0.02 | 0    | 0    | 0.08 | 0    | 0.01 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.77 | 0    | 0    | 0    | 0    | 0    |
| v   | 0.02 | 0.02 | 0    | 0    | 0    | 0.01 | 0.03 | 0.04 | 0    | 0    | 0.01 | 0    | 0    | 0    | 0.01 | 0.01 | 0.02 | 0    | 0    | 0.01 | 0.01 | 0.89 | 0.01 | 0    | 0.04 | 0    |
| w   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.01 | 0.01 | 0.06 | 0    | 0    | 0    | 0    | 0    | 0.02 | 0.02 | 0.94 | 0    | 0    | 0    |
| x   | 0    | 0.01 | 0    | 0    | 0.02 | 0.01 | 0.01 | 0    | 0.03 | 0    | 0.01 | 0.01 | 0    | 0    | 0    | 0    | 0.01 | 0.01 | 0.01 | 0    | 0    | 0    | 0    | 0.71 | 0    | 0    |
| Y   | 0.02 | 0    | 0    | 0    | 0    | 0.01 | 0    | 0.02 | 0    | 0    | 0.02 | 0    | 0    | 0    | 0    | 0.02 | 0    | 0    | 0.01 | 0.01 | 0    | 0.02 | 0    | 0.06 | 0.75 | 0    |
| z [ | 0    | 0.01 | 0    | 0    | 0.03 | 0.01 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.03 | 0    | 0.11 | 0.02 | 0    | 0    | 0    | 0    | 0    | 0.73 |