| Models | Precision | Recall | F 1 |
|----------------------------|-----------|--------|------------|
| H-LSTMs+supervised | 0.9784 | 0.9466 | 0.9621 |
| H-LSTMs | 0.9638 | 0.9448 | 0.9542 |
| Linear SVM+tfidf | 0.9824 | 0.8856 | 0.9313 |
| Linear SVM+embedding | 0.9529 | 0.9206 | 0.9364 |
| Linear SVM+tfidf+embedding | 0.9837 | 0.9253 | 0.9536 |
| Kernel SVM+tfidf | 0.9684 | 0.8730 | 0.9180 |
| Kernel SVM+embedding | 0.9408 | 0.9141 | 0.9273 |
| Kernel SVM+tfidf+embedding | 0.9714 | 0.9174 | 0.9436 |