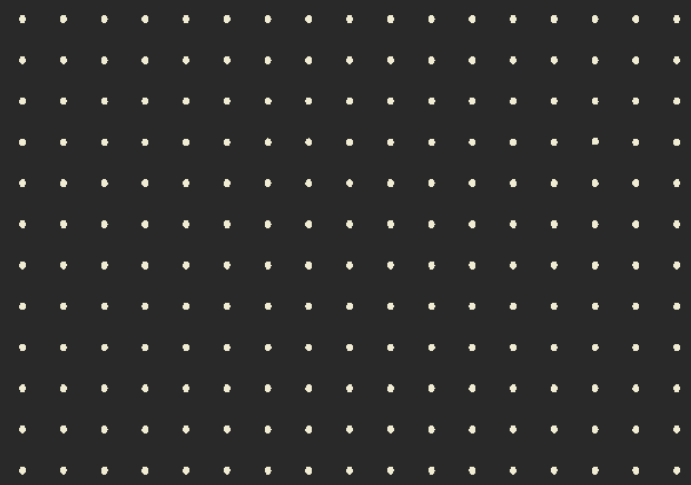
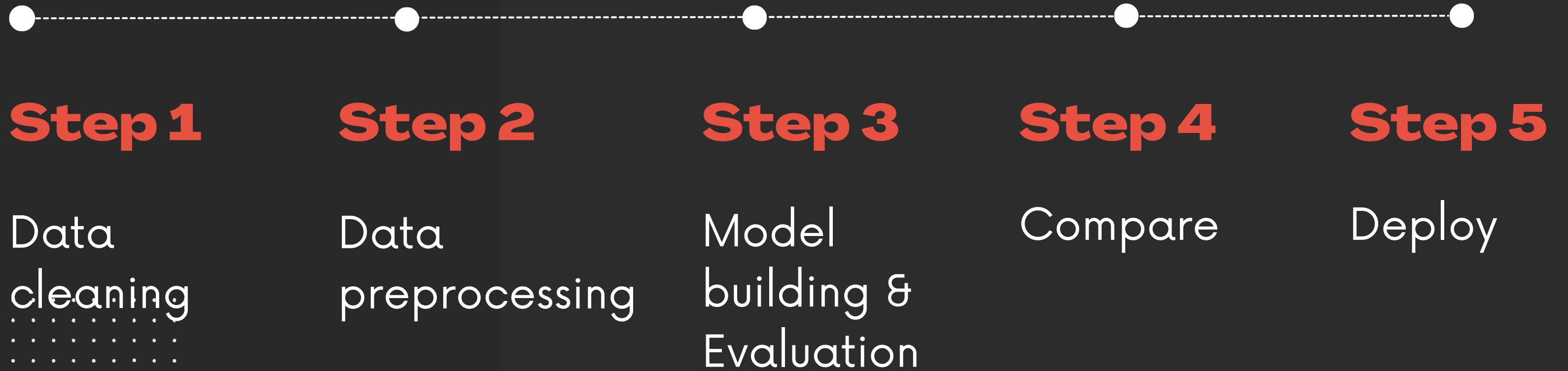


Fanal Project Application Project

IS210.N21.HTCL



Step to take





Deep learning that we choose

IS210.N21.HTCL



...

CNNs

Model	Accuracy (%)		F1-macro (%)	
	Task 1	Task 2	Task 1	Task 2
Text-CNN	84.18	83.42	77.89	64.74
LSTM	82.97	83.35	77.24	66.58
GRU	83.50	82.84	77.67	66.51
PhoBERT	90.01	88.93	86.89	72.17
BERT4News	86.39	86.20	86.16	62.62

01

Model	Accuracy
:-----:	:-----:
textCNNs	0.820015
LSTMs	0.81094

ideas

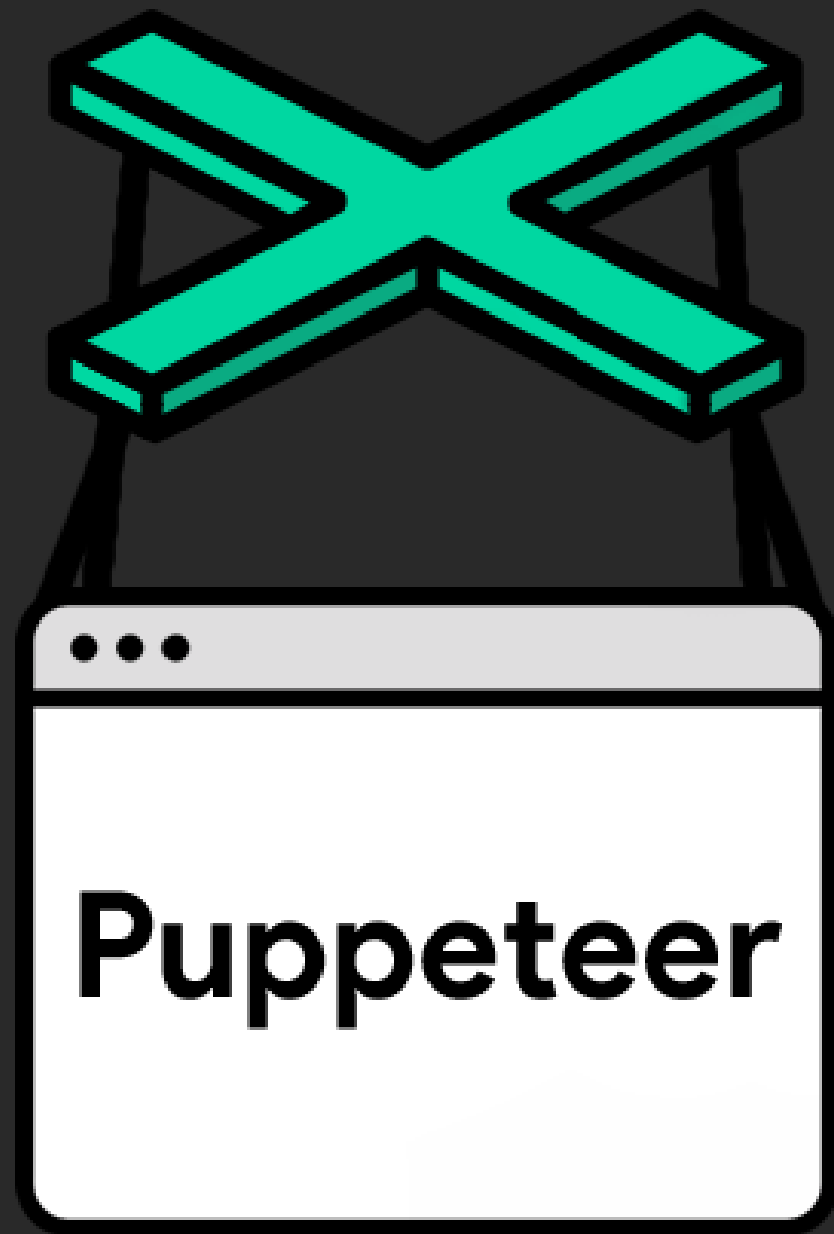


2 ways to apply it:

- Use detection spam feedback model to generate report dashboard
- Model integration for filtering and banning spam review in e-commerce platforms

02

03 Use detection spam feedback model to generate report dashboard



CNNs
model



hvPlot

03 Use detection spam feedback model to generate report dashboard

In [8]: df.head(7)

Out[8]:

	Unnamed: 0	Username	Rating	Posted At	Product Categories	Review Text	Shop's response	Likes	Page	Class	Probability
0	0	h*****a	5	2021-10-26 10:34	bạn mới nhập coshbm 50 đơn 0đ thực phẩm chức ...	Hàng giao đúng như trong mô tả, đóng gói đẹp, ...	NaN	0	1	0.0	0.000003
1	1	ngocshina	5	2022-04-26 16:29	bạn mới nhập coshbm 50 đơn 0đ thực phẩm chức ...	Chưa dùng nên chưa biết hiệu quả. Giao hàng nh...	NaN	0	1	0.0	0.000009
2	2	t*****9	5	2022-02-16 21:19	bạn mới nhập coshbm 50 đơn 0đ thực phẩm chức ...	Sản phẩm giao hàng rất nhanh, chất lượng tốt c...	NaN	0	1	1.0	1.000000
3	3	hong_minh79	5	2023-02-14 22:21	bạn mới nhập coshbm 50 đơn 0đ thực phẩm chức ...	Công dụng: giải rượu\nMinh đã mua lần 2. Uống ...	Rohto Mentholatum Việt Nam xin chào bạn, Rohto...	0	1	0.0	0.087927
4	4	trangtranggggg144	5	2021-10-22 09:32	bạn mới nhập coshbm 50 đơn 0đ thực phẩm chức ...	Hàng ok, đóng gói cẩn thận k bị vỡ. Chất lượng...	NaN	0	1	0.0	0.525038
5	5	thanhluan8688	5	2022-05-04 20:22	bạn mới nhập coshbm 50 đơn 0đ thực phẩm chức ...	Đã mua lần 2, công dụng giải rượu rất tốt\nSẽ ...	NaN	0	1	1.0	1.000000
6	6	getcaimat	5	2023-04-03 20:17	bạn mới nhập coshbm 50 đơn 0đ thực phẩm chức ...	Đối tượng sử dụng: người lớn\nCông dụng: giải ...	NaN	0	2	1.0	0.999985

03 Use detection spam feedback model to generate report dashboard

Class	It is label of review contain. Simiular to base the dataset class 1 is spam and 0 is not
Probability	Probability is a most important value to decide spam or not. if probability is greater than 0.7 score then review as spam and label is 1

03

**Use detection
spam feedback
model to
generate report
dashboard**

04

Model integration for filtering and banning



The main idea is generate a table contain status of review that has some values like: approval, unapproval, spam, ...



05

conclusion

**Why do we need
a modern
communications
company?**

- Improved decision-making
- Competitive advantage
- Enhanced customer satisfaction
- Improved review quality
- Protection against fraud
- Trust and credibility

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