# About the Beamer class in presentation making A short story

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# Proposal

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## The Enron Email Dataset

no, i dont mind. : - )	
Original Message	
Hi how are you doing? I have a meeting from 4 to 5, do you mind waiting for me? Thank John $$	S.
Original Message	

hello

#### The Enron Email Dataset

yuck yuck

—Original Message—

har har

The subject is: Wine tasting.

#### The Enron Email Dataset

- https://www.kaggle.com/claudioscheer/extract-reply-emails;
- Get only emails with less than 256 characters;

Final dataset: 40 062 input-target pairs. Train dataset: 10 002 input-target pairs.

# Samples

Input	Target
I thought this one was canceled. So	You're right.
I declined to get it off my calendar.	
Rex - thanks for the quick re-	Who will sign theses?
sponseplease note the revised let-	
ters below. Previous email had a	
clerical error	
Where can I get info on safety	Ralph, please get with Rod and
statistics for the pipes?	provide what ever he needs in the
	way of Safety Stats.

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## Hugging Face

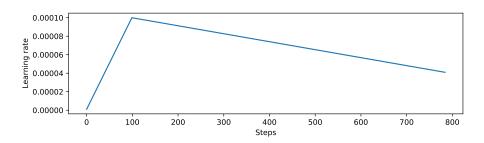
- BERT base;
  - 12 layers;
- Hugging Face and PyTorch;
- NVIDIA T4 GPU on AWS;
  - 16GB;

#### BERT architecture

Describe here the architecture that the professor showed in the class.

## Learning rate schedule

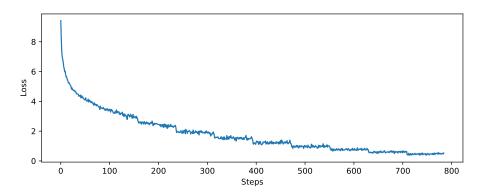
- Warm-up steps: 5000;
- Learning rate: 1e-4;



# Optimizer and hyperparameters

- Adam;
  - Adam epsilon: 1e-4;
- Batch size: 10;
- Fine-tuning epochs: 10.5;
- Beam search hypothesis: 3;

## Loss function



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## BLEU score

• 21 emails in the evaluation dataset;

## BLEU score

- 21 emails in the evaluation dataset;
- BLEU score = 0.0;

## **BLEU** score

Input	Target	Generated			
nevermind. are you at	yea	i'm all alone over			
work?		here			
what re your plans for	drop prentice's car off	leaving early tomor-			
tomorrow?	at shop; go to dome	row. leaving early.			
		leaving early. leaving			
		early.			
I just refaxed it. For	I noted your hoursl	Thanks Rick, and let's			
your information, my	will look for the t/s	talk after the holidays		talk after the holidays	
total hours is 49.	Thanks Lisa!	about a new game		about a new game	
		plan Best regards			
		and happy thanksgiv-			
		ing. Jaime Williams.			

# Generated replies

Email	Reply	AI?	Was it AI?
Let me know if this works.	This works great. Will let you	100%	yes
	know. as soon as I get a chance,		
	let me know		
Following are the terms under	Kate, I ran the report with the	50%	yes
which I ran the Forward Obliga-	exact same options and it came		
tion report and received this mes-	right up. Try it again, exactly as		
sage: General SQL error. ORA-	before. Usually if it works for one		
00907: missing right parenthesis.	person and not the other it is a		
Terms: Let me know what you	security issue. Let me know what		
find. Thanks!	happens. Thanks, Brettther		
Didn't you trade uranium at one	Yeah, I know the buisness VERY	33.3%	no
time?	well.		
Are you free for drinks either	Yes	66.7%	no
Monday or Wednesday?			
Mons, I would be available on	OK, so, let's see if we can get	16.7%	yes
the 25th, 26th or 27th. I can-	together later today. I have to		
not make it the week of the 18th.	leave at 16:00 for a few minutes,		
Thanks, Bill.	but I am sure that I will be out at		
	that moment. Thank you Kim.		

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## Miscellaneous

- https://github.com/claudioscheer/seq2seq-bert;
- Final release (v0.0.8);
- The Enron Email Dataset;
- Dataset parser;