

NLP14: An Evaluation View for a **Semi-Automated Text Annotation Tool**

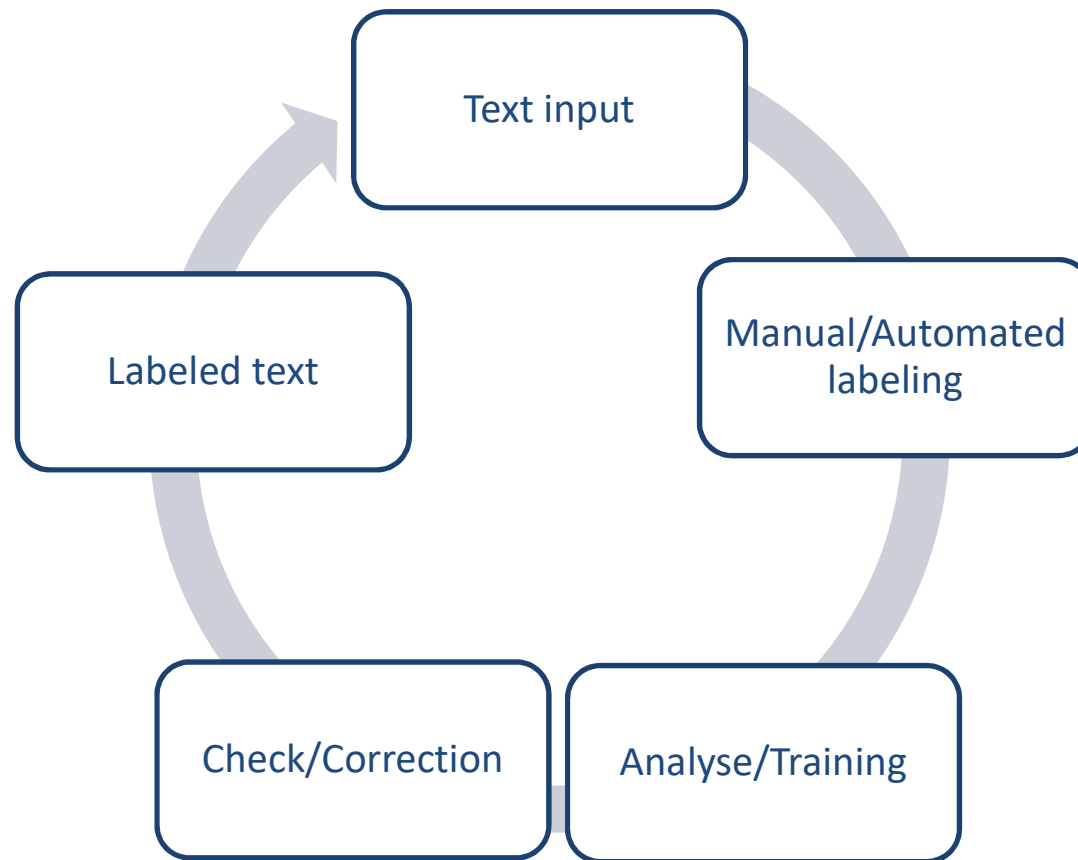
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Supervisor: Felix Hamborg

Key Competences in Computer Science
Final-Presentation

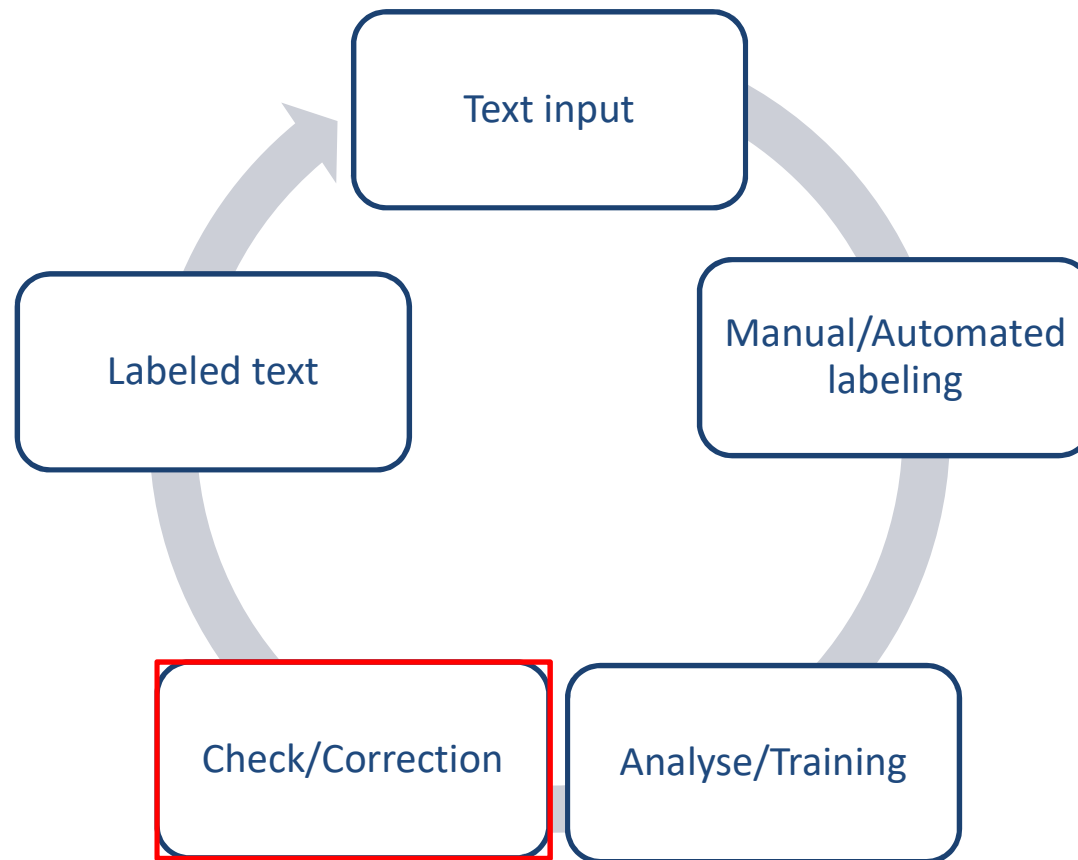
Outline

- Project recap
- Key aspects and problems
- Final result
- Evaluation

Project recap



Project recap



Semi-Automated Text Annotation Tool

Key aspects and problems

- Getting pre labeled data from the AI

["National way of life", "Traditional morality", "Law and order", "Civic mindedness", "Multiculturalism"]

"0_0":

{"text": " FOR THE COMMON GOOD This is the manifesto of the Green Party of England and Wales.",

"correct_labels": [0, 0, 0, 0, 0],

"logits": [0.33273453850460355, 0.15300497052962525, 0.5488117758878551, 0.1052410061010296, 0.6937513102379289],

"predictions": [0, 0, 1, 0, 1],

"doc_id": 0,

"is_training": 1}

- Getting pre labeled data from the AI

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{"0": {"text": " * FOR THE COMMON GOOD This is the manifesto of the Green Party of England and Wales.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.33273453850460355, 0.153008494, 0.5488117758878551, 0.1052410061010296, 0.6937513102379289], "predictions": [0, 0, 1, 0, 1], "doc_id": 0, "is_training": 1}, {"0_1": {"text": "It covers England and Wales, not the United Kingdom.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.4500114241300601, 0.6009368689752742, 0.03700553971459164, 0.06166439246143107, 0.1642850073526183], "predictions": [0, 0, 0, 0], "doc_id": 0, "is_training": 1}, {"0_2": {"text": "There are independent sister Green parties in Scotland and Northern Ireland.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.0322828101590902, 0.2862912686350555, 0.3421526271569453, 0.41742003914526105, 0.6326287528050348], "predictions": [0, 0, 0, 0, 1], "doc_id": 0, "is_training": 1}, {"0_3": {"text": "Text of the Green Party's websites are at www.scottishgreens.org.uk and www.greenparty.org.uk The text in this document may be reproduced free of charge in any format or medium provided that it is reproduced in full and not used in a misleading context.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.6800437212405085, 0.35275883369414107, 0.42244909789240415, 0.49650541359227185, 0.777170979], "predictions": [1, 0, 0, 0, 1], "doc_id": 0, "is_training": 0}, {"0_4": {"text": "Enquiries relating to the content of and the copyright in this document should be sent to: The Registrar of Companies, The Green Party of England and Wales Development House 56\u2011201364 Leonard Street Britain has the wealth and resources to do great things.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.2531078943841859, 0.02706353823010721, 0.31039822226032787, 0.3490473089459458, 0.248081128045896], "predictions": [0, 0, 0, 0, 0], "doc_id": 0, "is_training": 0}, {"0_5": {"text": "Britain has the wealth and resources to do great things. We can build an economy that gives everyone their fair share of the world's sixth-richest economy.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.07137092850973226, 0.3544557414141414, 0.2839317505759833, 0.8075414140486648, 0.41245507616122], "predictions": [0, 0, 0, 0, 0], "doc_id": 0, "is_training": 0}, {"0_6": {"text": "We can create a humane, caring society that supports everyone's needs.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.3582815065071401, 0.07962336574169193, 0.12594599563126396, 0.682575594482046, 0.2247537946950767], "predictions": [0, 0, 0, 1, 0], "doc_id": 0, "is_training": 0}, {"0_7": {"text": "And we can be a world leader in tackling the threat of climate change.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.23468537345443607, 0.7801613480531823, 0.21419752967710592, 0.5665879044276624, 0.623884257309481], "predictions": [0, 1, 0, 1, 1], "doc_id": 0, "is_training": 1}, {"0_8": {"text": "Sadly, our current politics is dominated by a small social group and the power of vested interests - are failing to realise this potential.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.17891987435260281, 0.26145868486232493, 0.5706526003771819, 0.49283843618974343, 0.7998986427880631], "predictions": [0, 0, 1, 0, 1], "doc_id": 0, "is_training": 0}, {"0_9": {"text": "Our manifesto is a bold plan to create a more equal, more democratic society while doing our part to heal the planet, which has been severely damaged by the effects of an unsustainable economy.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.3788091778808763, 0.1242654151524406, 0.27681528239604036, 0.5313421427217292, 0.20318603841214866], "predictions": [0, 0, 0, 1, 0], "doc_id": 0, "is_training": 0}, {"0_10": {"text": "The austerity experiment has failed, as it did in the 1930s.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.3794022017156772, 0.17438379795850623, 0.4807467329630517, 0.12777451947674212, 0.4352770999457126], "predictions": [0, 0, 0, 0, 0], "doc_id": 0, "is_training": 0}, {"0_11": {"text": "Text of the Green Party's websites are at www.scottishgreens.org.uk and www.greenparty.org.uk The text in this document may be reproduced free of charge in any format or medium provided that it is reproduced in full and not used in a misleading context.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.559416416135907, 0.2677111111111111, 0.2770172589976366, 0.18825961782180933, 0.6886520179865631], "predictions": [1, 0, 0, 0, 1], "doc_id": 0, "is_training": 1}, {"0_12": {"text": "Millions of households are living in fear of want.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.089527273711177, 0.2811072873730225, 0.11300065832320205, 0.33906192321468764, 0.7100973470093007], "predictions": [0, 0, 1, 0], "doc_id": 0, "is_training": 0}, {"0_13": {"text": "Our NHS is being handed over to the private sector, resulting in a more expensive and inferior service, while highly skilled staff are underpaid and treated without proper respect.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.8463387669166276, 0.3538602951768228, 0.024275803586034095, 0.1927974671898, 0.04837745056253578], "predictions": [1, 0, 0, 0, 0], "doc_id": 0, "is_training": 0}, {"0_14": {"text": "Governments of all colours since 1945 have failed to tackle climate change the greatest challenge of our time.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.4381399719586264, 0.84860623126045, 0.6646912369902107, 0.41265140596598, 0.14057466195113155], "predictions": [0, 1, 1, 0, 0], "doc_id": 0, "is_training": 0}, {"0_15": {"text": "Yet none of this is inevitable there is a real alternative.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.6923238072758962, 0.2551800884454547, 0.3541234062808928, 0.4397963820842751, 0.5981947030591761], "predictions": [1, 0, 0, 0, 1], "doc_id": 0, "is_training": 0}, {"0_16": {"text": "We do not apologise for being bold, ambitious or having a long term vision for our country.", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.16491940699678864, 0.348928774658957, 0.01903898490779876, 0.6254543067689815, 0.5500849707205239], "predictions": [0, 0, 0, 1, 1], "doc_id": 0, "is_training": 1}, {"0_17": {"text": "We certainly can", "correct_labels": [0, 0, 0, 0, 0], "logits": [0.16491940699678864, 0.348928774658957, 0.01903898490779876, 0.6254543067689815, 0.5500849707205239], "predictions": [0, 0, 0, 1, 1], "doc_id": 0, "is_training": 1}

```

Key aspects and problems

- Showing them with filter options

Label filter

☐ National way of life

☐ Traditional morality

☐ Law and order

☐ Civic mindedness

☐ Multiculturalism

☐ Unknown

Search for keyword:

Search for document:

Certainty filter:

Key aspects and problems

- Showing them with filter options

Label filter

☐ National way of life

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☐ Unknown

Search for keyword:

Search for document:

Certainty filter:

Key aspects and problems

- The possibility to correct wrong labels

Further develop the Dublin-Belfast rail line as part of an integrated rail service serving major population cent

Traditional morality

Submit

50.24% certainty

Enquiries relating to the content of and the copyright in this document should be sent to: The Press Office TH
Leonard Street Britain has the wealth and resources to do great things.

Enter Label

Submit

0% certainty

Enquiries relating to the content of and the copyright in this document should be sent to: The Press Office TH
Leonard Street Britain has the wealth and resources to do great things.

National way of life

Submit

100% certainty

Key aspects and problems

- Exporting final data



Exported data format:

```
{"index":"0_4","text":"Enquiries relating to the content ... ",  
"label":"National way of life","percentage":100,"labelPos":-1,"docNumber":0}
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Problems

- New coding language
- Performance
- Time Management
- Backups

Demo

TextAnnotationTool V1.0

Creating a more equal society, reversing the trend towards a society divided between poverty and great wealth.	Doc. 0
<input type="text" value="Civic mindedness"/> <input type="button" value="Submit"/> 50.16% certainty	
When things go wrong, the government blames the companies to which it has outsourced its work, and politicians are accused of being on the make.	Doc. 0
<input type="text" value="Civic mindedness"/> <input type="button" value="Submit"/> 50.63% certainty	
Some are, as we found out during the expenses scandal.	Doc. 0
<input type="text" value="National way of life"/> <input type="button" value="Submit"/> 50.92% certainty	
We need to improve the way the UK is governed, passing power back to the people, back to where they live and work.	Doc. 0
<input type="text" value="National way of life"/> <input type="button" value="Submit"/> 50.77% certainty	
Reflecting the devolved status of Wales within the UK, the Wales Green Party has an autonomous status within the wider party and publishes independent policy statements and its own manifesto covering all areas of devolved power.	Doc. 0
<input type="text" value="Multiculturalism"/> <input type="button" value="Submit"/> 50.93% certainty	
Support initiatives to make the arts and sports accessible to all.	Doc. 0
<input type="text" value="Traditional morality"/> <input type="button" value="Submit"/> 50.84% certainty	
Green councillors bring safer cycling...	Doc. 0
<input type="text" value="Civic mindedness"/> <input type="button" value="Submit"/> 50.41% certainty	
We seek a just, sustainable and peaceful solution to the Arab-Israeli conflict, based on mutual recognition of the rights to independent statehood for Palestinians and Israelis.	Doc. 0
<input type="text" value="Civic mindedness"/> <input type="button" value="Submit"/> 50.95% certainty	
International disarmament and security agreements The Green Party will ensure that UK security and defence policies are consistent with international law, including international humanitarian law, and that the UK implements in good faith all relevant obligations in the following international treaties: the Nuclear Non-Proliferation Treaty, the Outer Space Treaty, the Biological Weapons Convention, the Chemical Weapons Convention, the Comprehensive Nuclear-Test-Ban Treaty, the Mine Ban Treaty, the Cluster Munitions Convention, the Arms Trade Treaty, the UN Programme of Action on Small Arms and Light Weapons, and the Geneva Protocols.	Doc. 0
<input type="text" value="Traditional morality"/> <input type="button" value="Submit"/> 50.91% certainty	

Label filter

- ☐ National way of life
- ☐ Traditional morality
- ☐ Law and order
- ☐ Civic mindedness
- ☐ Multiculturalism
- ☐ Unknown

Search for keyword:

Search for document:

Certainty filter:

Submitted labels: 0

Evaluation

- Performance
- Design
- Filter
- To much scrolling



Thanks for listening!

Are there any questions?