Writing an applied text analytics research proposal



EPSRC Engineering and Physical Sciences Research Council is a major UK supporter and funder for research projects in Engineering and Physical Sciences, including AI and NLP. The EPSRC website gives guidance on writing research project proposals, see

https://epsrc.ukri.org/funding/applicationprocess/preparing/writing/

https://epsrc.ukri.org/funding/applicationprocess/preparing/writing/caseforsupport/



EPSRC standard proposal

A standard proposal to EPSRC includes several forms and tables, but the core document is 7 pages:

Proposed research and its context [6 pages] to include:

Background, Contribution to knowledge, Importance, Research hypothesis & objectives,

Programme & methodology

[about 1 page each; Background and Programme maybe more] and **Workplan** diagram, eg Gantt Chart [additional 1 page]

Research hypothesis and objectives



"Set out your research idea or hypothesis. ...

Explain why the proposed project is novel and timely, e.g. emphasising the scientific ambition, or any potential transformative outcomes.

Identify the overall aims of the project ...

and the measurable objectives against which the outputs, outcomes and impacts of the work will be assessed."

State "deliverables" – things you will deliver: methods, data, software, website etc



Programme and methodology

Describe the work programme including research and impact related activities

...Identify the contribution of each member of the research team including any project partners and stakeholders.

... Provide objectives and milestones that will be used to monitor progress and explain how the project will be managed. ..."

The research work programme should make use of an appropriate methodology for AI projects, such as CRISP-DM.

The 1-page workplan diagram should match and illustrate the written description of the work programme.

Background



Introduce the proposal topic and explain its academic, industrial, policy, societal, or other relevant context.

Indicate who might benefit from the research, and how ...

Explain where this work relates to past and current work in the UK and abroad ...

Cite REFERENCES to show your knowledge of related research; but these must fit within the 6 page limit.



Contribution to knowledge

Describe how your research would benefit national and international researchers in the field and related disciplines. ...

What will be done to ensure that they can benefit, including any opportunities to engage with researchers in other disciplines to broaden the reach of the new knowledge...

Importance



... Explain how the research may contribute to the health of other research disciplines; to current or future national economic success; to future development of key emerging industries; or addresses key societal challenges

... Indicate how the research relates to EPSRC's research areas and strategies. ...



Project duration and manpower

Project duration and manpower is up to you; eg:

1 researcher for 6 months (MSc Project?) / 3 years (PhD?)

2+ researchers, for 2+ years?

BUT the manpower must match the work programme: "Identify the contribution of each member of the research team"

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Ideas for text analytics research

- Select recent research task, adapt to your job/company
- Select research on English, adapt to another language
- collect and label a novel specialized Corpus, for ML
- SemEval task, eg Offensive Language Identification
- PhD project outline eg http://www.comp.leeds.ac.uk/eric

Include use of at least two data mining and/or text analytics methods, techniques or resources introduced in this module, applied to your job/company/language.

Summary



Write a text analytics research proposal, following EPSRC guidelines; 7 pages:

Proposed research and its context [6 pages] to include: Research hypothesis & objectives,

Programme & methodology,

Background, Contribution to knowledge, Importance.

[about 1 page each; Background and Programme maybe more]

and Workplan diagram, eg Gantt Chart [additional 1 page]

Can be based on recent work, adapted to new users/language