The emplab package*

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Introduction 1

This package provides useful macros for software engineering papers.

2 Usage

\etal Use \etal to typeset "et al." appropriately. We extended the method in So-and-So \etal~\cite{soandso}. We extended the method in So-and-So et al. [1]. Use \n gram to typset n-gram appropriately. \ngram We built an \ngram\ language model. We built an n-gram language model. Use \tfidf to typset tf-idf appropriately. We calculated \tfidf. We calculated tf-idf. Use \token, and its small-caps variant \stoken to typeset tokens for use in demon- $\text{token}(\langle text \rangle)$ $\left(text \right)$ strating a natural language pipeline.

> Accuracy was highest for \token{if}, \token{\{}, \stoken{Identifier}, and \stoken{String} tokens.

Accuracy was highest for if, { |, IDENTIFIER |, and STRING | tokens.

Use \researchquestion to declare a research question. Refer to it inline in text \researchquestion $\{\langle text \rangle\}$ $\RQ(number)$ using \RQ. In both cases, you must explicitly provide the research question number.

^{*}This document corresponds to emplab v1.0, dated 2017/04/11.

```
\researchquestion{\RQ{1}:
    What do we do with 14,374 pairs of stolen underwear?
}

RQ1: What do we do with 14,374 pairs of stolen underwear?
```

The answer to $\RQ1$ proved to be inconclusive.

The answer to $\mathbf{RQ1}$ proved to be inconclusive.

\hassanbox Wraps text in a box to emphasize a point, such as a research question or a result.

\hassanbox{Shigesato Itoi seemed to really like The Beatles.}

Shigesato Itoi seemed to really like The Beatles.

3 Implementation

\ngram It uses a math mode n to emphasize that n is a mathematical constant, and not an abbreviation. We use \$\$ instead of \(and \) because the latter are fragile commands.

```
1 \newcommand{\ngram}{$n$-gram}
```

\tfidf

 $2 \neq 2$

\etal We could probably go really crazy with the implementation, but this is sufficient for now.

```
3 \newcommand{\etal}{et al.}
```

\RQ

 $\label{eq:local_$

\researchquestion

5 \newcommand\researchquestion[1]{\begin{quote}#1\end{quote}}

\token,\stoken

```
6 \newcommand{\token}[1]{{\small\framebox{#1}}}
7 \newcommand{\stoken}[1]{\token{\textsc{#1}}}
```

\hassanbox

```
8 \newcommand{\hassanbox}[1]{%
9 \smallskip%
10 \noindent\framebox{%
11 \begin{minipage}[c]{0.97\linewidth}%
12 \begin{center}%
13 #1\par%
14 \end{center}%
```

```
15 \end{minipage}%
16 }%
17 \smallskip%
18 }
```

References

[1] Foobar So-and-So, An example bibliography entry, Fake publisher, Persephone, 2nd edition, 2017.

Change History

```
v1.0 General: Initial version \dots 1
```