

**QUANTIFYING CONCEPTUAL DENSITY IN TEXT**

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**Aims** Conceptual Density describes the degree to which concepts are interdependent, or to what degree they interact with each other. This idea is related to (intrinsic) cognitive load, where understanding and acquisition of new skills & knowledge may be hindered by an increasing degree of interdependence between concepts. There is a sizeable amount of literature on cognitive load theory, however it remains difficult to objectively measure this phenomenon. We aim to establish a method of quantifying the conceptual density in text corpora.

**Objectives**

- Background reading on:
  - Conceptual Density
  - Hypertext markers
  - Textual Signposting
  - Topic Segmentation
  - Other relevant topics
- Identify suitable text corpora
- Design experiments to test published natural language processing methods on the above corpora
- Develop, implement, and test systems for quantifying conceptual density.

**Timeline**

- Mar-Apr: Background reading
- Apr-May: Identifying text corpora
- Jun: Designing experiments & preliminary results (Interim report)
- Jul-Aug: Testing published methods on corpora
- Sep-Oct: Developing, implementing, and testing systems for quantifying conceptual density (Final report).

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