

# **CITE PEEK**

## **Contextual Citation Exploration Within Research Papers**





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# User Experience and Interaction Design Lab

#### Motivation

- Academic readers flip between the text and references, interrupting their flow.
- Context-switching breaks comprehension and flow.
- No inline, context-aware citation support exists today.
- Hunting down key figures and tables in cited papers interrupts analysis.
- Manual literature searches for related works are slow and error-prone.

## Objective

- Design and implement CitePeek, an interactive PDF reader that embeds citation context directly into the document, so users never lose their place when exploring a reference.
- Enable on-demand, multi-level summaries of relevant information without leaving the page.
- Integrate semantic similarity ranking and citation network discovery to surface the most relevant paragraph and related works in real time.

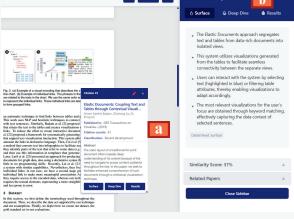
## Contribution

- Automatically retrieve and display the most relevant information without leaving the page.
- surfaces the most contextually relevant citations and dynamically links related works.

#### What CITEPEEK Offers?

Upload your PDF, and CitePeek instantly pulls each citation's metadata. Click any citation to open a pop-up showing its metadata and a concise abstract (a). Choose Surface (b), Deep Dive (c), and Results (d) in the sidebar, see the top paragraph highlighted (e), and explore related papers without ever leaving your document (f).

Surface Analysis

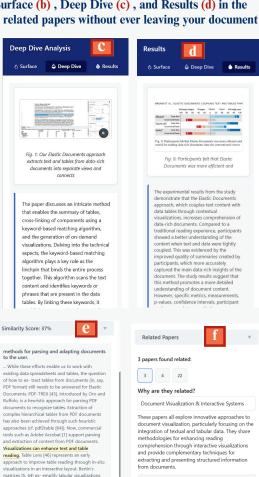


#### Sidebar Levels

- Surface: Presents fast bullet takeaways for quick context (b).
- Deep Dive: Offers a narrative summary of relevant information alongside the most relevant figure (c).
- Results: Displays a report of the citation's key charts and statistics (d).

#### Semantic Similarity & citation network

- Computes semantic similarity between your current context and the cited paper.
- Ranks and displays the top paragraph, emphasizing the single most related sentence (e).
- Clustering papers' references by shared topics or methods, displaying a mini-graph with summaries of each inter-paper relationship (f).



Paper #3 Details

Smith. L. Johnson. P. (2021)

Networks

Abstract

Interactive Visualization of Citation

citation networks in academic literature

ov visually encoding cell values within tables and

isualiza- tions [10, 24] enhance document reading

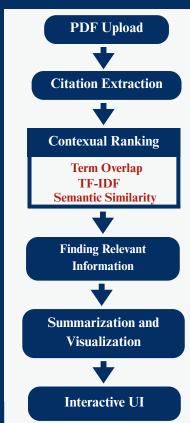
View Paper with Relevance

Highlights

with graphical encodings that span the size of a

supporting grouping operations. Word-scale

System Design



- Conclusion
- CitePeek embeds citation context directly into PDFs, eliminating disruptive backand-forth between text and reference lists.