

## Text mining tools in legal documents

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### Abstract

We present the architecture of the system for the intellectual textual analysis in jurisprudence based on microservices. The system can identify common dependencies on an existing database of legal documents, provide legal cases close to each other, familiarize them with the most probable outcomes of judicial review or mark out important places during procedural actions.

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### Keywords

Analytics and data management, Clustering, Data intensive domains, Digital libraries, Microservices, Recommender system

### References

- [1] Peroni, S.: SemanticWeb Technologies and Legal Scholarly Publishing Law, Springer, Governance and Technology Series, 15 (2014). doi 10.1007/978-3-319-04777-5
- [2] Gold, N. et al.: Understanding Service Oriented Software. IEEE Software, 21 (2), pp. 71-77 (2004)
- [3] Jones, S.: Toward an Acceptable Definition of Service. IEEE Software, 22 (3), pp. 87-93 (2005)
- [4] Fowler, M.: Microservices a definition of this new architectural term. <https://martinfowler.com/articles/microservices.html>
- [5] Stenetorp, P., Pyysalo, S., Topić, G., Ohta, T., Ananiadou, S., Tsujii, J.: Brat: a Web-based Tool for NLP-Assisted Text Annotation. Proc. of the Demonstrations Session at EACL (2012)
- [6] Ricci, F., Rokach, L., Shapira, B., Kantor, P. B.: Recommender Systems Handbook. N.Y.: Springer (2011)
- [7] <https://ru.wikipedia.org/wiki/TF-IDF>
- [8] <https://ru.wikipedia.org/wiki/K-means>