

**INTERNSHIP / MASTER THESIS IN LAUSANNE OR BERNE**. Join our team as intern and you will find a young, dynamic and culturally diverse working environment.

# **Intelligent Document Retrieval**

#### DESCRIPTION

Modern search engines are constantly becoming more powerful and sophisticated allowing to index millions of documents and executing complex user queries in minimal time. Nevertheless, human intelligence and intervention is still needed to identify, interpret, extract and link relevant content from returned documents.

Recent advances in machine learning (ML) and natural language processing (NLP) have enabled us with promising tools and techniques for automating tasks, such as named entity recognition (NER), topic extraction, document categorization, query expansion, document recommendation, text summarization etc. The objective of the internship consists in designing, evaluating and implementing an ensemble of techniques, that complement/boost the capabilities of existing state-of-the-art search engines and facilitate users in identifying, extracting and linking relevant information from various, often heterogenous, sources.

# **OBJECTIVES**

- > The candidate will pursue research and development and will engage in the following activities:
- > Concepting/Developing/Integrating an end-to-end solution
- > Designing/Evaluating multilingual models for various ML tasks
- > Delivering a productive proof of concept "as a Service"
- > Proofing business cases to answer market challenges

## KNOWLEDGE/SKILLS REQUIRED

- Interest in machine learning, data science, natural language processing and information retrieval
- > Software engineering and programing skills (Python/Java, Linux)
- > Very good language skill of English and either French or German
- > Experience with the Elastic Stack (ELK), Kafka and Scrapy is a plus

### ABOUT ELCA

With more than 900 employees, ELCA is one of the biggest independent Swiss IT solutions providers, and a leader in the fields of IT business consulting, software development and maintenance, as well as IT systems integration. The company, with offices in Lausanne, Geneva, Berne, Zurich, Basel, Paris, Madrid, Granada (near-shore), Ho Chi Minh City (VN) and Port-Louis (MAU) (offshore development) is privately owned. ELCA has an annual revenue of over 100 million Swiss francs.

**IF YOU ARE INTERESTED** in applying for this position, please send us your complete application (CV, cover letter, transcripts, diplomas and certificates).

### **ELCA Informatique SA**

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