Antonios Minas Krasakis

Personal Details

Birth Date: 27 February 1991
Publications: Google Scholar
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Education

Sept 2019 - Present — **PhD Candidate** at IRLab, University of Amsterdam
Research topics: Conversational Search, Information Retrieval

Sept 2017 - Sept 2018 — **MSc. Data Science**
University of Amsterdam, The Netherlands
Cum Laude | GPA: *8,4/10,0* | Thesis grade: *9,0/10,0* (**top 5%**)

Sept 2008 - Jul 2015 — **Dipl. Electrical & Computer Engineering**
Aristotle University of Thessaloniki, Greece
GPA: 7,0/10,0 | Thesis grade: *10,0/10,0*

Research Interests

- Information Retrieval (IR)
- Retrieval Augmented Generation (RAG)
- Large Language Models (LLMs)
- Conversational Search

Publications

WebConf 2025 *(under submission)*	Constructing negated & set-compositional representations for first-stage ranking. **A.M. Krasakis**, A. Yates, E. Kanoulas
WebConf 2025 *(under submission)*	Corpus-Informed Retrieval Augmented Generation of Clarifying Questions **A.M. Krasakis**, A. Yates, E. Kanoulas
TOIS 2023	Contextualizing and Expanding Conversational Queries without Supervision **A.M. Krasakis**, A. Yates, E. Kanoulas
SIGIR 2022	Zero-shot Query Contextualization for Conversational Search **A.M. Krasakis**, A. Yates, E. Kanoulas
ICTIR 2020	Analysing the Effect of Clarifying Questions on Document Ranking in Conversational Search **A.M. Krasakis**, M. Aliannejadi, N. Voskarides, E. Kanoulas
AKBC 2019	Semi-supervised Ensemble Learning with Weak Supervision for Biomedical Relationship Extraction **A.M. Krasakis**, E. Kanoulas, G. Tsatsaronis

Working Experience

Sept 2022 - Mar 2023 — **Applied Science Intern** at Amazon, Barcelona, ES
As part of the Amazon product search team, I worked on Learned Sparse Retrieval (LSR) and Multilingual Retrieval. My project focused on (a) applying LSR methods in production product search pipelines and (b) testing their generalization capabilities to new languages.

Dec 2018 - Aug 2019 — **Data Scientist** at BOL.com, Utrecht, NL
As part of the Data Science team responsible for content, I initiated and worked on a project to facilitate content-based recommendations for pairs of related products .

Apr 2018 - July 2018 | **Data Scientist (thesis internship)** at Elsevier, Amsterdam, NL

Thesis title: Semi-supervised ensemble learning based on weak supervision, for biomedical relation extraction

Worked on Information Extraction from scientific articles. Proposed and implemented a novel weak supervision approach for the task of relationship extraction.

Oct 2014 - Jul 2015 | **Data Scientist (thesis internship)** at Intelen Services Ltd., Athens, GR

Performed Data Analysis on energy consumption data in non-interconnected electricity networks. Implemented Machine Learning algorithms for prediction and customer segmentation, with time-series data.

Teaching

Autumn '23 & Spring '24 | Guest Lectures:
Retrieval Augmented Generation
Information Retrieval II - MSc. AI (Univ. of Amsterdam)

Autumn '21 | *Conversational Passage Retrieval*
Information Retrieval II - MSc. AI (Univ. of Amsterdam)

Student Supervision:

2021 - 2022 | Andrew Harrison (MSc. AI thesis)
2020 - 2021 | Liang Huang (MSc. AI thesis)
Spring 2019 | Renuka Gurung (MSc. Data Science thesis)

Teaching Assistantship:

Autumn '20,'21,'23 | Information Retrieval II (MSc. AI - Univ. of Amsterdam)
Spring 2020 | Applied Machine Learning (BSc. AI - Univ. of Amsterdam)

Invited Talks

May '22 | Conversational Dense Retrieval
Neural Search Talks podcast

November '21 | Conversational Passage Retrieval
Dutch School for Information and Knowledge Systems (SIKS)

Shared Task Participation

Summer '23 | TREC-iKAT:
Combining LLMs & retrieval for creating personalized conversational assistants. Benchmarking LLMs in Retrieve-then-Generate (RAG) & Generate-then-Retrieve pipelines.
🥇 *Our submission achieved the best results in this track!* [paper]

Summer '21 | TREC-CAsT:
Introduced a novel approach to perform zero-shot Conversational Search, using a token-level Dense Retriever. [paper]

Summer '20 | TREC-COVID:
Worked on a novel weak-supervision/meta-learning approach, trying to train text-to-text rankers from multiple simpler rankers.

Languages

English: Full professional proficiency [C1 Level]
German: Limited working proficiency [B2 Level]
Greek: Mother-tongue