

Chris Samarinas

College of Information and Computer Sciences, University of Massachusetts Amherst
140 Governors Drive, Amherst, Massachusetts 01003-9264

chris.samarinas@gmail.com - algotprog.com

SUMMARY

PhD candidate in Information Retrieval at UMass Amherst specializing in conversational information seeking, representation learning, and ranking. Founder of Naget, developing a low-fee platform featuring instruction-based personal search. My industry experience spans 3 AI startups (adtech, fintech, biotech) and research internships at Adobe, Amazon, and Netflix, where I've tackled complex NLP challenges including contextual recommendations, conceptual search, relation extraction, fact-checking and generative conversational retrieval. Two-time Alexa Prize participant (2021 and 2022) with previous research experience at NUS. Dedicated to advancing multimodal content organization and discovery.

EDUCATION

University of Massachusetts Amherst, Amherst, USA
PhD in Computer Science

September 2021 – 2026 (expected)

- Research in *conversational information seeking* at the [Center for Intelligent Information Retrieval](#) (CIIR)
- Supervisor: [Hamed Zamani](#)

University of Massachusetts Amherst, Amherst, USA
M.Sc. in Computer Science

September 2021 – 2023

- Synthesis project: *Language Models for Proactive Conversational Retrieval*
- Supervisors: [Hamed Zamani](#), [Mohit Iyer](#)

Aristotle University of Thessaloniki, Thessaloniki, Greece
Bachelor of Science (B.Sc.) in Computer Science

October 2013 – Jun 2017

- GPA: **9.67/10.00**, ranked **1/120**, highest GPA since **1992** out of 2,500+ CS graduates, top **0.04%**
- Ranked **1/120** in the national university entrance exam in my department and top **0.2%** nationwide.
- Thesis: *Mining answers from the web using information retrieval techniques and machine learning*

WORK EXPERIENCE

University of Massachusetts Amherst, Amherst, USA
Research Assistant

September 2021 – 2026 (expected)

- Research Assistant at the [Center for Intelligent Information Retrieval](#), supervised by [Hamed Zamani](#).
- Research in *conversational information seeking* (conversational IR, clarifying questions).
- Team Lead / Member for the [Alexa Prize Taskbot Challenge 2 \(2022\)](#) and [Taskbot Challenge \(2021\)](#).

Netflix, Los Gatos, CA, USA
Machine Learning Research Intern

February 2025 – May 2025

- *Generative retrieval and re-ranking* for conversational search, **Interactive Discovery team**.

Amazon, Sunnyvale, CA, USA
Applied Scientist Intern

July 2024 - October 2024 &
June 2025 - September 2025

- *Generative retrieval* for conversational music search, **Alexa Audio Search & Discovery team**.

Adobe, Remote, USA
Research Intern

June 2022 – December 2022

- *Multi-step query reformulation for dense retrieval*, **Real-time Experiences and Algorithms Lab**.

Ro5, Remote
Machine Learning Consultant (Knowledge Graph)

February 2021 – August 2021

- **Ro5** is a biotechnology company that accelerates drug discovery, development, repurposing, and clinical trials.
- Responsible for the automated construction of a *biomedical knowledge graph* from research papers.
- Worked on *biomedical entity extraction*, *supervised entity resolution* and *relation classification*.

National University of Singapore, Singapore
Research Assistant

February 2020 – April 2021

- *Latent retrieval for large-scale fact-checking and question answering* with prof. Wynne Hsu, president of **IDS** and prof. Mong Li Lee, president of **CTIC**. (IEEE ICTAI 2020)
- Developed a framework for large-scale semantic search that returns text snippets related to questions or statements and deployed it in a real-world search engine for COVID-19, launched by the president of NUS.
- Research on *multi-stage evidence retrieval for large-scale fact-checking*. (NAACL 2021) and on *explainable fake news detection based on content and social context*.

Plural AI, London, United Kingdom
Research Engineer (**employee #1**)

October 2018 – January 2020

- **Plural AI** is a fintech start-up that builds a *knowledge engine* for finance. The company focuses on extracting content from corporate websites and financial statements to enrich a *knowledge graph*, and support complex question answering.
- Developed a novel framework for *concept extraction* from corporate websites. Owned the whole machine learning pipeline, from the *annotation tool development* and website crawling, to the productionization and deployment.
- Developed a smart tool for efficient curation of an industrial *category graph*.
- Developed a scalable semantic search service of companies using a novel *topic modelling* technique.

Donaco LTD, London, United Kingdom
Research Engineer

June 2018 – January 2019

- **Donaco** is an online advertising start-up that tries to revolutionize online donations.
- Designed a system for contextual recommendation of charity campaigns in news articles.

Freelance Software Engineer (early stuff)

2009 – November 2018

- My YouTube utility app got over **1M** downloads and was **acquired** by a small company in Poland.
- Developed a metasearch engine for a client in Germany and a location-based web search UI for a client in Canada.
- Short-term contractor for the development of the new version of the *historical HotBot* search engine.
- Developed and sold a script that bypassed Google's Custom Search API limitations and offered an interface for 'instant search', which among others was also used by a **company** in Turkey that got **\$2.5M** government funding.

PUBLICATIONS & PREPRINTS

Distillation and Refinement of Reasoning in Small Language Models for Document Re-ranking

Chris Samarinas, Hamed Zamani (preprint)

Beyond Factual Accuracy: Evaluating Coverage of Diverse Factual Information in Long-form Text Generation

Chris Samarinas, Alexander Krubner, Alireza Salemi, Youngwoo Kim, Hamed Zamani (preprint)

Simulating Task-Oriented Dialogues with State Transition Graphs and Large Language Models

Chris Samarinas, Pracha Promthaw, Atharva Nijasure, Hansi Zeng, Julian Killingback, Hamed Zamani (preprint)

ProCIS: A Benchmark for Proactive Retrieval in Conversations

Chris Samarinas, Hamed Zamani, *SIGIR 2024*

Multi-Modal Augmentation for Large Language Models with Applications to Task-Oriented Dialogues

Chris Samarinas, Pracha Promthaw, Rohan Lekhwani, Sheshera Mysore, Sung Ming Huang, Atharva Nijasure, Hansi Zeng, Hamed Zamani, proceedings of the *Alexa Prize Taskbot Challenge 2022*

Revisiting Open Domain Query Facet Extraction and Generation

Chris Samarinas, Arkin Dharawat, Hamed Zamani, long paper at *ICTIR 2022*

MarunaBot: An Extensible Retrieval-Focused Framework for Task-Oriented Dialogues

Amit Hattimare, Arkin Dharawat, Yelman Khan, Yen-Chieh Lien, [Chris Samarinas](#),

George Wei, Yulin Yang, Hamed Zamani, proceedings of the *Alexa Prize Taskbot Challenge 2021*

Improving Evidence Retrieval for Automated Explainable Fact-Checking

[Chris Samarinas](#), Wynne Hsu, Mong Li Lee, system demonstration at *NAACL 2021*

Latent Retrieval for Large-Scale Fact-Checking and Question Answering with NLI Training

[Chris Samarinas](#), Wynne Hsu, Mong Li Lee, long paper at *IEEE ICTAI 2020* [[news](#)] [[blog post](#)]

AWARDS

Bioengineering Hackathon, 1st place , <i>EMB IEEE Student Chapter AUTH, StudentGuru</i>	2018
1st place for developing DropSense in 48 hours, a platform that monitors and connects elderly with their relatives and paid carers using Wear OS smartwatches.	
Hackathon Thessaloniki, Honor , <i>Municipality of Thessaloniki</i>	2014
awarded for developing CityReport in 24 hours, an online web application for instant issues reporting	
Great Moment for Education Scholarship, Award , <i>Eurobank Ergasias</i>	2013
scholarship for achieving the highest grade at school at the national university admission examination	
National Mathematical Olympiad, First Prize , <i>Hellenic Mathematical Society</i>	2009
awarded for competing in the final stage "Archimedes", top 50 out of over 20,000 participants	

GRANTS

Bodossaki Foundation PhD scholarship , <i>Bodossaki Foundation</i>	2021
\$60,000 scholarship for my 5-year PhD studies in Information Retrieval	
Tensorflow Research Cloud Program , <i>Google</i>	2020
Granted free access to TPU pods for 6 months for our project on large-scale latent retrieval	
Innovate UK Smart Grant , <i>UK Research and Innovation</i> , 1% acceptance rate	2019
£400,000 for our work at Plural AI, building a knowledge engine for the finance industry	
Horizon 2020 Grant , <i>EU Funding for Research and Innovation</i> , 16% acceptance rate	2019
£50,000 for our research at Plural AI on entity extraction and semantic search	

SERVICE & MENTORING

Reviewer: SIGIR 2024, SIGIR 2025, ACL (ARR), ACM TOIS

Mentor:

- 2022 Early Research Scholars Program (ERSP) at UMass
- PhD Applicant Support Program (PASP) at UMass
- Supervised 7 master's and 4 undergraduate students on research projects