

# Department of Computer Science Distinguished Lecture Series

2021  
/22



## Dr. Georgia Koutrika

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Athena Research Center  
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**3 May 2022 (Tuesday) 4:00-5:00pm GMT+8 (Hong Kong Time)**  
via Zoom (The meeting details will only be provided to registrants.)

## Fairness in Algorithmic Systems: A Reality or a Fantasy?

### Abstract

Algorithmic systems, driven by large amounts of data, are increasingly being used in all aspects of society to assist people in forming opinions and taking decisions. For instance, search engines and recommender systems amongst others are used to help us in making all sort of decisions from selecting restaurants and books, to choosing friends and careers. Other systems are used in school admissions, housing, pricing of goods and services, job applicant selection, and so forth. Such algorithmic systems offer enormous opportunities, but they also raise concerns regarding how fair they are. How much trust can we put in these systems?

We will analyze fairness risks through well-known use cases. Then, we will present some representative models and methods for fairness in search engines and recommender systems. We will conclude our journey to algorithmic fairness by discussing challenges and critical research paths for future work.

### Biography

Georgia Koutrika is a Research Director at Athena Research Center in Greece. She has more than 15 years of experience in multiple roles at HP Labs, IBM Almaden, and Stanford. Her work emerges at the intersection of data management, natural language processing and deep learning and focuses on intelligent and interactive data exploration, conversational data systems, and user-driven data management. Her work has been incorporated in commercial products, described in 14 granted patents and 26 patent applications in the US and worldwide, and published in more than 100 papers in top-tier conferences and journals.

Georgia is an ACM Senior Member and IEEE Senior Member. She is a member of the VLDB Endowment Board of Trustees, member of the PVLDB Advisory Board, member of the ACM-RAISE Working Group, co-Editor-in-chief for VLDB Journal, PC co-chair for VLDB 2023, co-EIC of Proceedings of VLDB (PVLDB). She has been associate editor in top-tier conferences (such as ACM SIGMOD, VLDB) and journals (VLDB Journal, IEEE TKDE), and she has been in the organizing committee of several conferences including SIGMOD, ICDE, EDBT, among others.

She has received a PhD and a diploma in Computer Science from the Department of Informatics and Telecommunications, University of Athens, Greece.



Event Registration :  
<http://bit.ly/bucs-ereg>

