# Michail Mylonakis, Ph.D.

in Michail Mylonakis

http://www.michailmylonakis.com/



# **Background & Interests**

My doctoral thesis was in the area of Shannon's Information Theory. I have a strong background in Probability, Statistics and Data Analysis. I have also a good knowledge of some modern tools of data science, e.g., Python, SQL, R, Matlab. I recently attended the 11-week online program Business Analytics: Decision-Making Using Data of University of Cambridge. My current interests are summarized as following:

- the application of the methods of Data Analytics for designing statistical experiments and analysing data in different fields,
- the systematic investigation of how Data Analytics can contribute to effective Decision-Making,
- the exploration of the limits of the predictive power of Big Data, by combining the depth of the insights that mathematics gives with the opportunities that the modern tools of data science provide.

### **Education**

2017 - 2023	Ph.D. Electrical Engineering	g. KTH Roval Institute	of Technology, Stockholm, Sweden
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Thesis title: Empirical Coordination over Networks Subject to Fidelity Criteria

Advisor: Mikael Skoglund

2014 - 2016 M.Sc. Electrical Engineering and Information Technology, Swiss Federal Institute of

Technology (ETH Zurich), Zurich, Switzerland

Thesis title: Capacity Bounds for the MIMO Free-space Optical Intensity Channel

Advisors: Stefan M. Moser, Amos Lapidoth

GPA: 5.1/6

2008 - 2014 Diploma. Electrical and Computer Engineering, National Technical University of

Athens (NTUA), Athens, Greece

Thesis title: Resource Allocation in Ad-Hoc Wireless Networks

Advisor: Panagiotis Cottis

GPA: 9.02/10

# **Research Publications**

#### **Journal Articles**

- M. Mylonakis, P. A. Stavrou, and M. Skoglund, "Empirical coordination subject to fidelity criteria," 2024, to be published.
- **M. Mylonakis**, P. A. Stavrou, and M. Skoglund, "Interference coordination over noisy channels subject to fidelity criteria," 2024, to be published.

### **Conference Proceedings**

**M. Mylonakis**, P. A. Stavrou, and M. Skoglund, "Adaptive interference coordination over channels with unknown state at the encoder and the decoder," in *Proceedings of the IEEE Information Theory Workshop (ITW)*, 2021, pp. 1–5.

- M. Mylonakis, P. A. Stavrou, and M. Skoglund, "Remote empirical coordination," in *Proceedings of the International Symposium on Information Theory and Its Applications (ISITA)*, 2020, pp. 31–35.
- **M. Mylonakis**, P. A. Stavrou, and M. Skoglund, "Empirical coordination subject to a fidelity criterion," in *Proceedings of the IEEE Information Theory Workshop (ITW)*, 2019, pp. 1–5.
- M. Mylonakis, P. A. Stavrou, and M. Skoglund, "Empirical coordination with multiple descriptions," in *Proceedings of the 57th Annual Alerton Conference on Communication, Control and Computing*, 2019, pp. 1074–1081.
- S. M. Moser, **M. Mylonakis**, L. Wang, and M. Wigger, "Asymptotic capacity results for mimo wireless optical communicatioon," in *Proceedings of the IEEE Internation Symposium on Information Theory* (ISIT), 2017.

### **Skills**

Primary Problem solving, Applied Mathematics, Data Analysis, Data Visualization, Databases, Algo-

rithms, Machine Learning, Big Data Analytics, Business Analytics

Coding Python, SQL, R, Matlab, C, Java

Misc. Academic research, Teaching, LaTeX, Microsoft Excel, Microsoft Office

Languages English, Greek, French (Beginner Level)

# Miscellaneous Experience

#### **Certifications**

Dec 2023 - March 2024 Business Analytics: Decision-Making Using Data, University of Cam-

bridge, 11-week online program

#### **Teaching Experience**

2018 - 2023 Teaching assistant in the Master's level course Information Theory and

Source Coding (EQ2845), KTH Royal Institute of Technology

### **Awards and Achievements**

2014 - 2016 Scholarship for postgraduate studies in countries worldwide, Onassis Foundation

### **Hobbies**

General Travelling, Movies

Sports Running, Trail Running, Soccer

Books Philosophy, History of science, Literature

### References

Available on Request