

Konstantinos Nikolakakis

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Research Interests

Machine & Reinforcement Learning, Dynamic Programming, Risk-aware decision making, Multi-Armed Bandits, Optimization, Probabilistic Graphical Models, Learning from graph-structured data/Graph recovery, Learning and Prediction making from noisy data

Employment

Yale University

Connecticut, U.S.A.

POSTDOCTORAL ASSOCIATE, SCHOOL OF ENGINEERING & APPLIED SCIENCE, ELECTRICAL ENGINEERING

Jul 2021 - Present

- Host: Prof. Leandros Tassioulas
- Research Domain: Machine learning approaches in networking

Michigan State University

Michigan, U.S.A.

POSTDOCTORAL RESEARCHER, DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

May 2021 - Jun 2021

- Host: Prof. Dionysios Kalogerias
- Core Project: Multi-agent decision making approaches with applications on supply chain optimization

Education

Rutgers University, Electrical and Computer Engineering

New Jersey, U.S.A.

PH.D. IN ELECTRICAL AND COMPUTER ENGINEERING

Feb 2016 - Apr 2021

- Thesis: Learning Tree-Structured Models from Noisy Data
- Adviser: Prof. Anand Sarwate
- GPA: 3.9/4

Rutgers University, Computer Science

New Jersey, U.S.A.

PH.D. CANDIDATE IN COMPUTER SCIENCE

Sep 2014 - Jan 2016

- Major: Machine Learning and Pattern Recognition
- Adviser: Prof. Dimitris Metaxas
- GPA: 3.8/4

University of Patras

Patras, Greece

DIPLOMA OF ELECTRICAL AND COMPUTER ENGINEERING, BACHELOR'S AND MASTER'S DEGREE

Sep 2009 - Jun 2014

- Major: Stochastic Signal Processing and Communications
- Adviser: Prof. George Moustakides
- GPA: 8.3/10

Publications

- **K. Nikolakakis**, D. Kalogerias, A. Sarwate, "Optimal Rates for Learning Hidden Tree Structures", under review, Journal of Machine Learning Research (JMLR), [available on ArXiv](#)
- **K. Nikolakakis**, D. Kalogerias, O. Sheffet, A. Sarwate, "Quantile Multi-Armed Bandits: Optimal Best-Arm Identification and a Differentially Private Scheme", IEEE Journal on Selected Areas in Information Theory, (JSAIT), May 2021
- **K. Nikolakakis**, D. Kalogerias, A. Sarwate, "Predictive Learning on Hidden Tree-Structured Ising Models", Journal of Machine Learning Research (JMLR 2021), vol. 22, no 59, pp. 1-82, February 2021
- **K. Nikolakakis**, D. Kalogerias, A. Sarwate, "Learning Tree Structures from Noisy Data", 22nd International Conference on Artificial Intelligence and Statistics (AISTATS 2019), Naha, Okinawa, Japan, April 2019

Invited Talks

- CISS, Princeton University, Princeton, New Jersey 2020
- Conference on "Inference on Graphical Models", Columbia University, New York, 2019

Teaching Experience

Rutgers University

New Jersey, U.S.A.

TEACHING ASSISTANT, DEPARTMENTS OF ELECTRICAL AND COMPUTER ENGINEERING & COMPUTER SCIENCE

Sep 2014 - Jan 2017

- Probability Theory and Stochastic Processes (Spring 2016, Fall 2016, Fall 2017)
- Programming in C & Unix (Fall 2014, Spring 2015, Fall 2015)

Technical Skills

PROGRAMMING

- Python, Matlab, C, C++, Unix
- Training and testing neural networks, Deep Learning, Deep Reinforcement Learning

Languages

English (Fluent), Greek (Native)