ISIDOROS TZIOTIS

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EDUCATION

Ph.D. in Electrical and Computer Engineering

2017 - 2022(expected)

University of Texas at Austin, USA(GPA 3.82/4.0)

Advisor: Prof. Aryan Mokhtari

Master of Science in Logic, Algorithms and Computation (MPLA)

2014 - 2016

National Kapodistrian University of Athens, Greece

Department of Mathematics (GPA 9.8/10)

Bachelor of Science in Informatics and Telecommunications

2007- 2013

National Kapodistrian University of Athens, Greece

Department of Informatics and Telecommunications (GPA 7.6/10)

MILITARY SERVICE

Greek Marine Force

2013-2014

RESEARCH INTERESTS

- Decentralized Optimization, Non-Convex Optimization, Federated Learning, Online Learning
- Combinatorial Optimization, Game Theory, Mechanism Design
- Approximation Algorithms, Computational Complexity

PUBLICATIONS

Isidoros Tziotis, Constantine Caramanis, Aryan Mokhtari.

Achieving Second Order Optimality in Decentralized Non-Convex Optimization via Perturbed Gradient Tracking.

Neural Information Processing Systems (NeurIPS), 2020.

Amirhossein Reisizadeh, Isidoros Tziotis, Hamed Hassani, Aryan Mokhtari, Ramtin Pedarsani.

Straggler-Resilient Federated Learning: Leveraging the Interplay Between Statistical Accuracy and System Heterogeneity.

Submitted to Neural Information Processing Systems (NeurIPS), 2021.

PROJECTS

Federated Learning with Incentives.

The focus of this project lies on the incentives of the agents participating in a Federated Learning framework and the formation of stable clusters with small aggregated loss.

Improving on Adaptive Gradient Methods.

In this work we aim to simplify the analysis of AdaGrad and remove the bounded gradient assumption maintaining the rates of the latest literature.

Cubic Regularized Newton's Method in Decentralized Systems.

In this project we focus on the problem of convergence to first and second order stationary points in multi-agent systems utilizing second order information.

CONFERENCES ATTENDED

AISTATS 2020

Artificial Intelligence and Statistics

NeurIPS 2020

Neural Information Processing Systems

Wale 2019

Workshop on Algorithms for Learning and Economics

20 PoA 2019

Twenty Years of the Price of Anarchy

NYCAC 2017

The New York Colloquium on Algorithms and Complexity

ACAC 2018, ACAC 2016, ACAC 2015, ACAC 2014

Athens Colloquium on Algorithms and Complexity

AGaThA 2016, AGaThA 2015, AGaThA 2014

Algorithmic Game Theory Athens

AtheCrypt 2016, AtheCrypt 2015, AtheCrypt 2014

Athens Cryptography Day

TEACHING ASSISTANTSHIP

National University of Athens

- Design and Analysis of Algorithms, Fall 2016
- Algorithmic Game Theory, Spring 2017

The University of Texas at Austin

- Design and Analysis of Algorithms, Fall 2017
- Design and Analysis of Algorithms, Spring 2018
- Advanced Topics in Algorithmic Game Theory, Spring 2019
- Design and Analysis of Algorithms, Fall 2019

TECHNICAL STRENGTHS

Programming Languages Python, C, C++, Java, Matlab Software & Tools MS Office, Latex

ACADEMIC ACHIEVEMENTS

Gerondelis Foundation Scholarship for Graduate Studies

Award for exceptional academic performance.

Cockrell School of Engineering Merit-based Recruiting Fellowship

Award for exceptional grades and academic performance.

2019

2018

Cockrell School of Engineering Merit-based Recruiting Fellowship

2017

Award for exceptional grades and academic performance.

Eurobank EFG Scholarship

2007

Award for top 10 students accepted at the department of Computer Science and Telecommunications.

EXTRA-CIRRUCULAR

• Participated in the First Division Panhellenic Chess Championship, in Rio, as a member of the chess club "F.O.N. Hrakliou".

2013

• Worked as a chess trainer at chess club "E.E.F.A.S. Vrilission".

2010-2013

• Member of the UT Racquetball Club.