

Andi Nika

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RESEARCH INTERESTS

Multi-armed Bandits, Combinatorial Bandits, Gaussian Processes, Active Learning, Bayesian Optimization, Reinforcement Learning, Online Learning, Pareto optimization.

EDUCATION

Master of Science, Electrical and Electronics Engineering
Bilkent University, Turkey, expected June 2021
CGPA: 3.47/4

Master of Science, Mathematics
Thesis: *The pandemic fusion system for endomorphism algebras of p -permutation modules*
Bilkent University, Turkey, September 2018
CGPA: 3.78/4

Bachelor of Science, Mathematics
University of Tirana, Albania, August 2015
CGPA: 7.03/10

PUBLICATIONS & PREPRINTS

- Andi Nika, Sepehr Elahi and Cem Tekin. Contextual combinatorial volatile multi-armed bandit with adaptive discretization. Volume 108 of Proceedings of Machine Learning Research, pp. 1486–1496, Online, 26–28 Aug 2020b. PMLR. URL <http://proceedings.mlr.press/v108/nika20a.html>
- Andi Nika, Kerem Bozgan, Çağın Ararat and Cem Tekin. Pareto active learning with gaussian processes and adaptive discretization. arXiv preprint arXiv:2006.14061, 2020a. URL <https://arxiv.org/abs/2006.14061>
- Muhammad Anjum Qureshi, Andi Nika¹ and Cem Tekin. Multi-user Small Base Station Association via Contextual Combinatorial Volatile Bandits. IEEE Transactions on Communications 10.1109/TCOMM.2021.3064939 URL <https://ieeexplore.ieee.org/document/9373701>
- First author in work on Combinatorial Gaussian Process Bandits submitted to ICML 2021 (full title not disclosed due to anonymity reasons).
- Andi Nika, Sepehr Elahi and Cem Tekin. Online Context-Aware Task Assignment in Mobile Crowdsourcing via Adaptive Discretization.²

CONFERENCES

Participated and presented my paper "Contextual combinatorial volatile multi-armed bandit with adaptive discretization" in *The 23rd International Conference on Artificial Intelligence and Statistics* (virtual conference), August, 2020.

Participated in *Functorial Methods in Representation Theory*, Nesin Mathematics Village, August 2017.

¹First two authors contribute equally.

²Work in progress, soon to be submitted to IEEE.

AWARDS AND SCHOLARSHIP

Graduate Research Conference best presentation award, Bilkent University, 2021.

TÜBİTAK research scholarship, 2018 - present.

Full Scholarship from Bilkent University for graduate studies in the Mathematics Department, 2016 - 2018.

Participated as Staff in *The 33rd Balkan Mathematical Olympiad*, Albania, May 2016.

First representative of the Albanian team in *27th Balkan Mathematical Olympiad* (BMO), Moldova, May 2010.

First Place in *The Albanian National Mathematical Olympiad*, selection phase for the BMO team, Moldova, May 2010.

First Place in *The Albanian Scientific Contest*, Albania, April 2009.

SKILLS

Language proficiency: English, Level C2 (TOEFL iBT score: **116/120**)

Programming Languages: Matlab and Python.

Operating Systems: Windows

WORK EXPERIENCE

Scientific Research Assistant at CYBORG lab (<http://cyborg.bilkent.edu.tr/>), Bilkent University, 2018 - current.

Teaching assistant in the Electrical and Electronics Engineering Department, Bilkent University, 2018 - 2021:

- EEE 202 (Circuit Theory)
- MATH 242 (Engineering Mathematics)
- EEE 361 (Linear Algebra in Data Analysis and Machine Learning)

Teaching assistant in the Mathematics Department, Bilkent University, 2016 - 2018:

- MATH 102 (Calculus 2)
- MATH 105 (Introduction to Calculus 1)

Coached high-school students for national math competitions, Albania, 2014 - 2015.

EXTRA-CURRICULAR ACTIVITIES AND INTERESTS

One of **top 10** finalists in the singing competition *Voice of Albania*, Albania, 2016.

Silver medal in *8th International Turkish Olympiad* (singing category), Turkey, 2010.

Strong interests in depth psychology and vitalist and existentialist philosophies with particular interest in the works of C. Jung, F. Nietzsche and H. Bergson.

Part of Aikido Club at Bilkent University for one year.