

Makis Arsenis

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EDUCATION

Cornell University

AUG. 2017 – AUG. 2023 (expected)

Ph.D. candidate in Computer Science, current GPA: 4.0
Advised by: Prof. *Robert Kleinberg*

Ithaca, NY

National Technical University of Athens (NTUA)

SEP. 2010 – JUNE 2017

Integrated Masters in Electrical and Computer Engineering, Major in CS
GPA: 9.18/10.00 (top 2%)

Athens, Greece

EXPERIENCE

Software Engineering Intern, Google

SUMMER 2022

Team: SPANNER | Google's Globally-Distributed DBMS

NYC, NY

Developed performance evaluation software in C++ to compare different columnar storage formats on production data for Spanner's storage engine. Based on the results, I suggested improvements to the automated format-selection mechanism.

Software Engineering Intern, Google

SUMMER 2021

Team: NAPA | Data Analytics Back End

Remote, USA

Designed and implemented in C++ multiple columnar storage formats for NAPA's storage engine. Achieved memory usage reduction during OLAP queries without compromising runtime efficiency.

Research Assistant, Cornell

2017 – PRESENT

Broadly interested in Combinatorial and Stochastic aspects of Algorithm and Mechanism Design, focusing on *online optimization under uncertainty* and its applications in the intersection of Economics and Computer Science.

Teaching Assistant, Cornell

2017 – PRESENT

CS 3110: Data Structures and Functional Programming — SPRING '23

CS 4820: Introduction to Analysis of Algorithms — FALL '17, SPRING '18, SPRING '22

CS 6820: Analysis of Algorithms — FALL '21, FALL '22

AWARDS

Silver Medal, 18th Balkan Olympiad in Informatics (BOI)

OCT. 2010

Bronze Medal, 22nd International Olympiad in Informatics (IOI)

AUG. 2010

Bronze Medal, 1st Junior Balkan Olympiad in Informatics (JBOI)

JULY 2007

COURSE PROJECTS

Lipschitz-Bounded Neural Networks (report) | CS 6780, Cornell | Python, PyTorch, Jupyter

SPRING 2019

Implemented a novel Neural Network architecture and evaluated its performance on standard data sets.

Linux character device driver | OS Lab, NTUA | C, bash

SPRING 2014

Coded up a Linux Kernel module parsing raw data from a device and channeling them to character device files.

Compiler for Pazcal^b (git repo) | Compilers, NTUA | C, flex, bison

SPRING 2013

Written in C, for a C-like source language to x86_64 target architecture.

TECHNICAL SKILLS

Modern C++  | Python  | OCaml  | Haskell  | SQL | Bash | L^AT_EX

NOTABLE PUBLICATIONS

“Individual Fairness in Prophet Inequalities”, with Robert Kleinberg, [pdf](#)

Extended abstract in the proceedings of the *23rd ACM Conference on Economics and Computation (EC) 2022*

“Constrained-Order Prophet Inequalities”, with Odysseas Drosis and Robert Kleinberg, [pdf](#)

In the proceedings of the *ACM-SIAM Symposium on Discrete Algorithms (SODA) 2021*

“Revenue Monotonicity under Misspecified Bidders”, with Odysseas Drosis and Robert Kleinberg, [pdf](#)

In the proceedings of the *16th Conference on Web and Internet Economics (WINE) 2020*