

Georgios Damaskinos

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| RESEARCH INTERESTS | Machine learning, Mobile computing, Distributed systems, Recommender systems | |
| EDUCATION | <p>Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland</p> <p>Doctor of Philosophy, Computer Science 09/2015 - 09/2020</p> <p><i>Thesis:</i> “Private and Secure Distributed Learning”</p> <p>Distributed Computing Lab - Rachid Guerraoui</p> | |
| | <p>National Technical University of Athens (NTUA), Athens, Greece</p> <p>Diploma in Electrical and Computer Engineering 10/2010 - 07/2015</p> <p>(5-year academic program, equivalent to M.Sc. degree)</p> <p><i>GPA:</i> 9.46 / 10 (top 2%)</p> <p><i>Major:</i> Computer Systems, Computer Software, Computer Networks</p> <p><i>Thesis:</i> “Profiling and cost modeling of join algorithms for Big Data Analytics”</p> <p>Built a machine learning tool that automatically chooses the optimal engine (Spark, Hive, PostgreSQL) and configuration for the deployment of various join algorithms.</p> <p>Computing Systems Laboratory - Nectarios Koziris</p> | |
| PUBLICATIONS | <p>[1] “FLeet: Online Federated Learning via Staleness Awareness and Performance Prediction” 12/2020</p> <p>G. Damaskinos, R. Guerraoui, A.M. Kermarrec, V. Nitu, R. Patra, F. Taiani</p> <p>Middleware 2020 (to appear), paper, code</p> | |
| | <p>[2] “DELf: Safeguarding deletion correctness in Online Social Networks” 08/2020</p> <p>K. Cohn-Gordon, G. Damaskinos, D. Neto, J. Cordova, B. Reitz, B. Strahs, D. Obenshain, P. Pearce, I. Papagiannis</p> <p>USENIX Security Symposium 2020, paper, video</p> | |
| | <p>[3] “Differentially Private Stochastic Coordinate Descent” 06/2020</p> <p>G. Damaskinos, C. Duennner, R. Guerraoui, N. Papandreou, T. Parnell</p> <p>PPML 2020, paper, code</p> | |
| | <p>[4] “The Imitation Game: Algorithm Selection by Exploiting Black-Box Recommenders” 06/2020</p> <p>G. Damaskinos, R. Guerraoui, E. Merrer, C. Neumann</p> <p>NETYS 2020 (International Conference on Networked Systems), paper, code, video</p> | |
| | <p>[5] “AggregaThor: Byzantine Machine Learning via Robust Gradient Aggregation” 05/2019</p> <p>G. Damaskinos, E.M. El Mhamdi, R. Guerraoui, A. Guirguis, S. Rouault</p> <p>MLSys 2019 (Conference on Machine Learning and Systems), paper, code, video</p> | |
| | <p>[6] “Asynchronous Byzantine Machine Learning (the case of SGD)” 07/2018</p> <p>G. Damaskinos, E.M. El Mhamdi, R. Guerraoui, R. Patra, M. Taziki</p> <p>ICML 2018 (International Conference on Machine Learning), paper, code</p> | |

[7] “Capturing the Moment: Lightweight Similarity Computations” 05/2017
 G. Damaskinos, R. Guerraoui, R. Patra
ICDE 2017 (IEEE International Conference on Data Engineering), [paper](#), [code](#)

EXPERIENCE [Facebook](#), London, United Kingdom
Software Engineer 10/2020 - Present
Software Engineering Intern 06/2019 - 08/2019
 Worked on the DELF paper [2] by mainly focusing on the performance evaluation. Implemented optimizations as a result of the visibility that this evaluation provided.
Language: Hack, SQL, Python

[IBM](#), Zurich, Switzerland
Research Intern 06/2018 - 09/2018
 Formally derived and implemented a differentially private optimization algorithm for generalized linear models, as part of the core algorithmic component of [SnapML](#). The work continued at EPFL and led to [3].
Language: Python

[Technicolor](#), Rennes, France
Research Intern 06/2017 - 08/2017
 Designed and implemented a method to boost the evaluation of a new recommendation service by exploiting the output of a supposedly well-established online recommender, acting as a black-box that the new service can query. Patent filed with number PCT/EP19/052345. The work continued at EPFL and led to [4].
Language: Python

[Athens Clue](#), Athens, Greece
Web Developer 12/2014
 Designed and implemented a web application for an escape room.
Language: JavaScript, HTML, CSS

High School Students, Athens, Greece
Tutor 03/2012 - 06/2015
 Provided complementary mathematics, physics, and programming lectures to 8 students who either needed additional help or wanted to go beyond their school curriculum and perfect their skills.

AWARDS **Best Teaching Assistant Award**, EPFL 12/2019
Runner-up for Best Internship Award, Technicolor 11/2017
EDIC PhD Fellowship, EPFL 04/2015
Thomaideio Award for the top graduating students, NTUA 2015
Papakyriakopoulos Award for excellence in Mathematics, NTUA 2011

PROFESSIONAL SERVICE *Reviewer:* AAAI 2020, NIPS 2020 (top 10% reviewer), ICML 2020 (top 33% reviewer), ICML 2019, MLSys 2019 (external)
Project mentor during PhD: **1** PhD semester, **1** MSc thesis, **5** MSc semester, **1** BSc semester, **1** intern
EPFL teaching assistant: Distributed algorithms CS-451 (2018, 2019),
 Real-time systems CS-321 (2018, 2019), Analysis 1 MATH-101 (2016, 2017)

TECHNICAL SKILLS (MAIN) *Programming:* Python, Java, C, C++
Frameworks/Tools: TensorFlow, Apache Spark, Android NDK, PyTorch

LANGUAGES Greek: Native proficiency
 English: Full professional proficiency (C2 - Michigan University ECPE)
 German: Limited working proficiency (B1 - Goethe Zertifikat)
 French: Elementary proficiency