

Curriculum Vitae

Sotirios Efstathios (Stathis) Maneas

Personal Information

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Research Interests

My research interests include the design and implementation of computer systems, especially storage and file systems, and distributed systems. My current research focuses on the reliability aspect of systems.

Education

Sep 2015 - Present **Ph.D. Candidate in Computer Science**,
Department of Computer Science,
University of Toronto
Advisor: Bianca Schroeder

Oct 2012 - May 2015 **M.Sc. in Computer Science**,
Dept. of Informatics and Telecommunications,
National and Kapodistrian University of Athens, Greece
Advisor: Mema Roussopoulos
GPA: 9.36/10.00

Sep 2008 - Sep 2012 **B.Sc. Degree in Computer Science**,
Dept. of Informatics and Telecommunications,
National and Kapodistrian University of Athens, Greece
Advisor: Alex Delis
GPA: 8.19/10.00

Professional Experience

Sep 2015 - Present **Graduate Research Assistant**
Systems and Networks Lab, Dept. of Computer Science, University of Toronto
Supervisor: Bianca Schroeder

Sep 2015 - Present **Graduate Teaching Assistant**
Dept. of Computer Science, University of Toronto

Aug 2013 - July 2015 **Research Assistant**
ERC project: “*Protecting and Preserving Human Knowledge for Posterity*”
National and Kapodistrian University of Athens

Sep 2012 - May 2013 **Software Engineer and Researcher**

Publications

2020

1. **Stathis Maneas**, Kaveh Mahdavian, Tim Emami, Bianca Schroeder, “*Reliability of SSDs in Enterprise Storage Systems: A Large Scale Field Study*”, to appear in ACM Transactions on Storage (TOS). **Invited Publication!**
2. **Stathis Maneas**, Nikos Chondros, Panos Diamantopoulos, Christos Patsonakis, Mema Roussopoulos, “*On Achieving Interactive Consistency in Real-world Distributed Systems*”, Journal of Parallel and Distributed Computing (JPDC), September 2020.
3. **Stathis Maneas**, Kaveh Mahdavian, Tim Emami, Bianca Schroeder, “*A Study of SSD Reliability in Large Scale Enterprise Storage Deployments*”, USENIX ;login;, Summer 2020 issue. **Invited Publication!**
4. Shehbaz Jaffer, **Stathis Maneas**, Andy Hwang, Bianca Schroeder, “*The Reliability of Modern File Systems in the face of SSD Errors*”, ACM Transactions on Storage (TOS), 16(1), March 2020. **Invited Publication!**
5. **Stathis Maneas**, Kaveh Mahdavian, Tim Emami, Bianca Schroeder, “*A Study of SSD Reliability in Large Scale Enterprise Storage Deployments*”, in the 18th USENIX Conference on File and Storage Technologies (FAST), 2020. **Best Paper Award! (Acc. Rate: 16.7%)**

2019

6. Shehbaz Jaffer*, **Stathis Maneas***, Andy Hwang, Bianca Schroeder, “*Evaluating File System Reliability on Solid State Drives*”, in the USENIX Annual Technical Conference (ATC), 2019. **(Acc. Rate: 19.9%)**

Our device mapper module can be downloaded from here:

<https://github.com/uoftsystems/dm-inject>

7. Nikos Chondros, Bingsheng Zhang, Thomas Zacharias, Panos Diamantopoulos, **Stathis Maneas**, Christos Patsonakis, Alex Delis, Aggelos Kiayias, Mema Roussopoulos, “*Distributed, End-to-end Verifiable, and Privacy-Preserving Internet Voting Systems*”, Computers & Security, 2019.
8. Xiaolong Xu, Qitong Zhang, **Stathis Maneas**, Stelios Sotiriadis, Collette Gavan, and Nik Bessis, “*VMSAGE: A virtual machine scheduling algorithm based on the gravitational effect for green cloud computing*”, Simulation Modelling Practice and Theory, 93:87–103, 2019.

2018

9. **Stathis Maneas**, Bianca Schroeder, “*The Evolution of the Hadoop Distributed File System*”, in the 14th International Symposium on Frontiers of Information Systems and Network Applications (FINA) in conjunction with the 32nd International Conference on Advanced Information Networking and Applications (WAINA), 2018.

2016

10. Nikos Chondros, Bingsheng Zhang, Thomas Zacharias, Panos Diamantopoulos, **Stathis Maneas**, Christos Patsonakis, Alex Delis, Aggelos Kiayias, Mema Roussopoulos, “*D-DEMOS: A Distributed, End-to-end Verifiable, Internet Voting system*”, in the Proceedings of the 36th IEEE International Conference on Distributed Computing Systems (ICDCS), 2016.

2015

11. Panos Diamantopoulos, **Stathis Maneas**, Christos Patsonakis, Nikos Chondros, Mema Roussopoulos, “*Interactive Consistency in practical, mostly-asynchronous systems*”, in the Proceedings of the 21st IEEE International Conference on Parallel and Distributed Systems (ICPADS), 2015.

Our open-source software can be downloaded from here:

<https://github.com/dsg-di/>

*These authors contributed equally to this work.

Teaching Assistantships

University of Toronto, St. George Campus

- *CSC209H: Software Tools and Systems Programming.*
Fall 2015, 2016, 2017, 2018, 2019
Winter 2016 (Double TAship), 2018, 2019, 2020
Summer 2018, 2019, 2020
- *CSC469H/CSC2208H: Operating Systems Design and Implementation.*
Fall 2017
- *Help Centre Teaching Assistant, Computer Science Help Centre.*
Fall 2016

University of Toronto Scarborough

- *CSCB09H: Software Tools and Systems Programming.*
Winter 2017 (Double TAship)
Summer 2017 (Double TAship)

National and Kapodistrian University of Athens

- *Systems Programming.*
Winter 2013, 2014, 2015
- *Operating Systems.*
Fall 2013
- *Introduction to Programming.*
Fall 2012, 2013
- *Object Oriented Programming.*
Fall 2012

Academic Presentations

- “A Study of SSD Reliability in Large Scale Enterprise Storage Deployments”, USENIX Conference on File and Storage Technologies (FAST), 2020.
- “Evaluating File System Reliability on Solid State Drives”, USENIX Annual Technical Conference (ATC), 2019.
- “A study of NAND/SSD Usage and Reliability in Large Scale Enterprise Storage deployments”, NetApp University talk, 2019.
- “The Evolution of the Hadoop Distributed File System”, the 14th International Symposium on Frontiers of Information Systems and Network Applications (IEEE FINA), 2018.

Awards & Honours

- Department of Computer Science (DCS), Conference Grant, 2020.
- School of Graduate Studies (SGS), Conference Grant, 2020.
- Doctoral Completion Award, University of Toronto, 2019.
- USENIX Annual Technical Conference (ATC), Student Grant, 2019.
- *Wolfond Fellowship*, University of Toronto, 2015.

Academic & Extra-Curricular Service

- Grad Visit Day Volunteer and Student Mentor, Department of Computer Science, University of Toronto.
- Social Coordinator, Computer Science Graduate Students' Benevolent Society (CSGSBS), 2016.

Computer Skills/Experience

Programming Languages: C, C++, Java, Python, R, Go.

Programming Environments: Eclipse, Netbeans, Geany, Code::Blocks, PyCharm, IntelliJ IDEA, JetBrains CLion, Microsoft Visual Studio (2008, 2010), Dev-C++, MySQL Workbench.

Other: Latex, Bash Shell Programming, Microsoft & Libre Office Suite, MySQL, PostgreSQL, Git, Apache Subversion, Apache Maven, Apache Ant, Google's Protocol Buffers, FUSE, GNU Gimp, Graphviz.

Languages

Greek: Native.

English: Excellent - TOEFL (Score: 108/120) & Certificate of Proficiency in English (ECPE).

Spanish: Very well - Diploma de Español como lengua extranjera (Nivel Intermedio).

Other Interests

Sports: Basketball, Soccer.

Music: Electric Bass Guitar.

Other: Movies, Travelling, Books, and Chess.