

# 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

Jan 2022 - Present **Intern**  
NetApp

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

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**  
Project: “*iMarine - Data e-Infrastructure Initiative for Fisheries Management and Conservation of Marine Living Resources*”  
National and Kapodistrian University of Athens.

## Publications

### 2022

1. **Stathis Maneas**, Kaveh Mahdavian, Tim Emami, Bianca Schroeder, “*Operational Characteristics of SSDs in Enterprise Storage Systems: A Large-Scale Field Study*”, in the 20th USENIX Conference on File and Storage Technologies (FAST ’22), 2022. **(Acc. Rate: 21.5%)**

### 2021

2. **Stathis Maneas**, Kaveh Mahdavian, Tim Emami, Bianca Schroeder, “*Reliability of SSDs in Enterprise Storage Systems: A Large Scale Field Study*”, ACM Transactions on Storage (TOS), January 2021. **Invited Publication!**
3. **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), January 2021.

### 2020

4. **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!**
5. 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!**
6. **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 ’20), 2020. **Best Paper Award! (Acc. Rate: 16.7%)**

### 2019

7. Shehbaz Jaffer\*, **Stathis Maneas\***, Andy Hwang, Bianca Schroeder, “*Evaluating File System Reliability on Solid State Drives*”, in the USENIX Annual Technical Conference (ATC ’19), 2019. **(Acc. Rate: 19.9%)**

Our device mapper module can be downloaded from here:  
<https://github.com/uoftsystems/dm-inject>

8. 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.
9. 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

10. **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

11. 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.

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\*These authors contributed equally to this work.

## 2015

12. 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/>

## 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, 2021  
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

- “*Operational Characteristics of SSDs in Enterprise Storage Systems: A Large-Scale Field Study*”, 20th USENIX Conference on File and Storage Technologies (FAST '22), 2022.
- “*A Study of SSD Reliability in Large Scale Enterprise Storage Deployments*”, 18th USENIX Conference on File and Storage Technologies (FAST '20), 2020.
- “*Evaluating File System Reliability on Solid State Drives*”, USENIX Annual Technical Conference (ATC '19), 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 14<sup>th</sup> International Symposium on Frontiers of Information Systems and Network Applications (IEEE FINA), 2018.

## Awards & Honours

- Doctoral Completion Award, University of Toronto, 2020.
- 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 '19), 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:** PyCharm, RStudio, Eclipse, Netbeans, CLion, Geany, Code::Blocks, IntelliJ IDEA, Microsoft Visual Studio (2008, 2010), Dev-C++, MySQL Workbench, Jupyter Notebook.

**Other:** Latex, Bash Shell Programming, MySQL, PostgreSQL, Git, Apache Subversion, FUSE, Apache Hive, Apache Maven, Apache Ant, Google's Protocol Buffers, 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.