

# Dimitra Giantsidi

Informatics Forum, University of Edinburgh  
10 Crichton Street, EH8 9AB  
Edinburgh, UK

Email: [dimitra.giantsidi@gmail.com](mailto:dimitra.giantsidi@gmail.com)  
Homepage: <https://dgiantsidi.github.io/>  
GitHub: <https://github.com/dgiantsidi>

## Education

**Ph.D.** in Computer Science (Sept 2019 - present)

*University of Edinburgh, UK*

*Thesis: Hardware-Assisted Dependable Distributed Data Management Systems*

**Microsoft Research PhD Fellow**

Advisor: Prof. Dr. Pramod Bhatotia

- Designed distributed systems for the untrusted cloud infrastructure with increased security properties and performance.
- Leveraged the recent hardware advancements in trusted computing, byte-addressable storage and direct I/O networking and SmartNICs.
- Submitted **4 first-author papers** and **2 first-author paper acceptances (top tier)**.
- **Awarded a best (first-author) paper nominee at IEEE/IFIP DSN'22[Rank: A1]** (3 nominees among 49 accepted papers and 262 total submissions).

**MSc** in Computer Science (Sept 2018 - Aug 2019)

*University of Edinburgh, UK*

→ **Highest Honors, Best Female MSc Thesis Award** [link]

**MEng** in Computer and Electrical Engineering (Sept 2012 - Mar 2018)

*National Technical University of Athens (NTUA), Greece*

→ **Highest Honors (Top 8%), Top 0.1% in national qualification exams**

## Employment

**Microsoft Research, Redmond, US** To start on May 2024

*Research Intern at Cloud and Infrastructure Security Group*

**Microsoft Research, Cambridge, UK** Sept 2021 - Dec 2021

*Research Intern at Confidential Computing Group*

Created a new high-performance Key-Value store system for privileged timing attacks on top of Intel SGX and RDMA. Exceptional throughput results on widely used workloads in Microsoft's private datacenter.

**University of Edinburgh, UK** June 2023 - present

*Research Assistant*

Created a new trusted NIC architecture for the cloud on top of FPGA-based SmartNICs. The system is superior in terms of performance and robustness w.r.t. current networked systems in the cloud.

**Intracom Telecom, Athens, Greece** Jul 2017 - Jul 2018

*Software Systems Engineer*

Designed and built a resource-aware infrastructure for the cloud-hosted data centers. The system saved energy and cpu resources while company's clients SLAs were met.

## Conference publications

TNIC: A Trusted NIC Architecture  
**ACM SIGCOMM 2024 (Under review)**

A Hardware-Accelerated RECIPE For Designing Byzantine Fault Tolerant Replication Protocols  
**ACM CCS 2024 (Under review)**

Anchor: Secure Persistent Memory Architecture  
*Dimitris Stravakakis, Dimitra Giantsidi, Maurice Bailleu, Philip Saendig, Shady Issa, Pramod Bhatotia*  
**SIGMOD'24**, Rank: A1

FlexLog: A Shared Log for Stateful Serverless Computing  
*Dimitra Giantsidi, Emmanouil Giortamis, Nathaniel Tornow, Florin Dinu, Pramod Bhatotia*  
**ACM HPDC'23 [code]**, Rank: A1, Acceptance rate: 18.20%

Treaty: Secure Distributed Transactions  
*Dimitra Giantsidi, Maurice Bailleu, Natacha Crooks, Pramod Bhatotia*  
**IEEE/IFIP DSN'22 (Best paper nominee) [code]**, Rank: A1, Acceptance rate: 18.20%

Avocado: A Secure In-Memory Distributed Storage System.  
*Maurice Bailleu, Dimitra Giantsidi, Vasilis Gavrielatos, Le Quoc Do, Vijay Nagarajan, Pramod Bhatotia*  
**USENIX ATC'21**, Rank: A1, Acceptance rate: 23.1%

DICER: Diligent Cache Partitioning for Efficient Workload Consolidation  
*Konstantinos Nikas, Nikela Papadopoulou, Dimitra Giantsidi, Vasileios Karakostas, Georgios Goumas, Nectarios Koziris*  
**ICPP'19**, Rank: A2, Acceptance rate: 20%

## Talks

ACM HPDC'23, Orlando, US  
*FlexLog: A Shared Log for Stateful Serverless Computing*

IEEE/IFIP DSN'22, Baltimore, US  
*Treaty: Secure Distributed Transactions*

Third Annual SGX Community Day 2022 (virtual)

USENIX ATC'21 (virtual)  
*Avocado: A Secure In-Memory Distributed Storage System*

## Academic professional experience

**Teaching assistant:** Operating systems and Distributed Systems Engineering courses  
*University of Edinburgh and TU Munich, Dec 2019 - present*

**BSc/MSc thesis advisor:** Supervised 3 BSc and 2 MSc thesis in TU Munich, Dec 2020 - present.

**Web chair:** EuroSys'21

**Reviewer:** EuroSys'23, SoCC'23, WWW'22

## References

**Prof. Dr. Pramod Bhatotia**

TU Munich, Germany

Email: pramod.bhatotia@cit.tum.de

**Prof. Dr. Manos Kapritsos**

University of Michigan, USA

Email: manosk@umich.edu

**Dr. Antonios Katsarakis**

Huawei Research Center Edinburgh, UK

Email: antonios.katsarakis@huawei.com

**Prof. Dr. Natacha Crooks**

UC Berkeley, USA

Email: ncrooks@berkeley.edu

**Dr. Florin Dinu**

Huawei Research Center Munich, Germany

Email: florin.dinu@huawei.com

**Prof. Dr. Antonio Barbalace**

University of Edinburgh, UK

Email: antonio.barbalace@ed.ac.uk