Fernando Pedone

1. Current position(s)

- Full Professor at the Faculty of Informatics (USI)
- Technical Director, Interchain Foundation (ICF)
- Director of the Computer Systems Institute (USI)
- Co-director of the FinTech Master program (USI)
- Associate editor of IEEE Transactions on Dependable and Secure Computing (TDSC)

2. Education

PhD   Computer Science, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland, 1999.
MSc   Computer Science, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre, Brazil, 1995.
BSc   Mechanical Engineering, University of Rio Grande (FURG), Rio Grande, Brazil, 1992.

3. Professional and academic experience

09/2012 – present	Full Professor, University of Lugano (USI), Switzerland
01/2020 – present	Technical Director, Interchain Foundation (ICF), Switzerland
06/2013 – 12/2013	Visiting Professor, Cornell University, USA
01/2007 – 08/2012	Associate Professor, University of Lugano (USI), Switzerland
10/2004 – 12/2006	Assistant Professor , University of Lugano (USI), Switzerland
05/2002 – 09/2004	Senior Researcher and Lecturer, EPFL, Switzerland
01/2000 – 08/2003	Research Scientist, Hewlett-Packard Laboratories (HP Labs), USA
10/1996 – 01/2000	Research and Teaching Assistant, EPFL, Switzerland

4. Research projects as leading investigator (last 5 years)

- Interchain Foundation, *Towards Planetary Robust Atomic Broadcast II*, 2020, $30kCHF.
- Interchain Foundation, *Towards Planetary Robust Atomic Broadcast*, 2019–2020, $120kCHF.
- SNSF, *TranScale: Towards a principled approach to highly available and scalable systems*, 2018–2022, $650kCHF.
- Western Digital, *Consensus for Main Memory*, 2018–2019, $50kCHF.
- SNSF, *Consensus Protocol Exploiting Network Co-Design*, 2016–2019, $256kCHF.
- CAPES/Brazil, Special Visiting Researcher Fellowship, *Scalable Dependability*, 2014–2017, $50kCHF.
- KTI/CTI, *Feasibility study: MoSQL Storage Engine*, 2014–2015, $115kCHF.
- Microsoft, *GeoGraph: Efficient Geographically Distributed Graph Infrastructure*, 2014–2017, $121kCHF.
- SNSF, *Cosmmus: an infrastructure for massively multiplayer online games*, 2013–2016, $176kCHF.
- SNSF, *Streamline 2: An Architecture for Application-Level Data Networking*, 2013–2016, $163kCHF.

5. Supervised PhD theses, important contributions to the career of scientists

- P. Coelho, *On the many faces of atomic multicast*, USI, 2019.
- T. Dang, *Consensus Protocols Exploiting Network Programmability*, USI, 2019.
  Co-supervision with R. Soule (USI).
- S. Benz, *Building global and scalable systems with Atomic Multicast*, USI, 2018.
- E. Bezerra, *Scalable State Machine Replication*, USI, 2016.
- O. Mendizabal, *Fast Recovery in Parallel State Machine Replication*, PUC-RS, 2016.
  Co-supervision with F. Dotti (PUC-RS).
- D. Sciascia, *High Performance Deferred Update Replication*, USI, 2015.
- R. Padilha, *Byzantine Fault Tolerant Storage for the Cloud*, USI, 2014.
- P. J. Marandi, *High-Performance State-Machine Replication*, USI, 2014.
- A. Malekpour, *A Transport Protocol for Best-Effort Content-Based Networks*, USI, 2012.
  Co-supervision with A. Carzaniga (USI).
- R. Rebiha, *Algebraic Formal Methods for Invariant Generation*, USI, 2011.
  Co-supervision with A. V. Moura (Unicamp).
- N. Schiper, *On Multicast Primitives in Large Networks and Partial Replication Protocols*, USI, 2009.
- V. Narvaez, *On Non-Intrusive Workload-Aware Database Replication*, USI, 2009.
- L. Camargos, *Multicoordinated Agreement Protocols and the Log Service*, USI, 2008.
  Co-supervision with E. Madeira (Unicamp).
- R. Schmidt, *Deferred-Update Database Replication: Theory and Algorithms*, EPFL, 2008.
  Co-supervision with W. Zwaenepoel (EPFL).

6. Prizes, fellowships, distinguished memberships

- Best paper award at the 31st IEEE International Symposium on Reliable Distributed Systems (SRDS), 2012. Paper "RAM-DUR: In-Memory Deferred Update Replication," with D. Sciascia.
- Best paper award at the 10th IEEE International Symposium on Network Computing and Applications (NCA), 2011. Paper "Belisarius: BFT storage with confidentiality," with R. Padilha.
- Best paper award at the 5th Latin-American Symposium on Dependable Computing (LADC), 2011. Paper "Byzantine Fault-Tolerant Deferred Update Replication," with N. Schiper and J. E. Armendariz-Inigo.
- Nominated by the thesis committee for the EPFL Best Thesis Award in 1999.

7. Organization of conferences

- PC co-chair, 49th IEEE/IFIP International Conference on Dependable Systems and Networks (DSN), 2019.
- PC co-chair, 20th International Conference on Principle of Distributed Systems (OPODIS), 2016.
- Track chair (Distributed Fault Tolerance and Dependability), 36th IEEE International Conference on Distributed Computing Systems (ICDCS), 2016.
- PC co-chair, IEEE Symposium on Reliable Distributed Systems (SRDS), 2011.
- Co-chair, 30 Years of Replication, Monte Verita Symposium, Ascona, Switzerland, November 2007.