Abstract:
In this talk I will speak about designing and developing distributed systems that are reliable, high-performant, and resource-efficient. Providing all these properties at once is challenging and has been the focus of my research in the past 7 years. These distributed systems are either designed for small data centres, or are cloud-based and thus multi-tenant. The outcome of this research has been practical; a subset of these systems were released as open source later, and the ideas developed in some others were the results of close collaborations with product teams at Microsoft. I will dedicate the final part of this talk to my current and future research plans, and will cover my teaching experience and plans for the future.

Bio: Parisa received her Ph.D in 2014 from University of Lugano. She visited Cornell University in 2013 as a research intern, and has been employed by Microsoft Research Cambridge from 2014 as a postdoctoral researcher. Parisa has been interested in the theory and practice of distributed systems, in particular fault tolerance, resource-efficient and multi-tenant replication in the cloud, network provisioning in data centres, unpredictability of virtual machines in the cloud, and in the past in the energy-optimal data transfer in wireless sensor networks.