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Before joining NIST in 2012, Abdella served as the Executive Director of The Mid-Atlantic Crossroads (MAX) GigaPop founded by The University Of Maryland, The George Washington University, The Georgetown University and The Virginia Polytechnic Institute.

From 2000 to 2009, he was Chief Technology Officer, and Vice President of Research and Development for Lambda OpticalSystems, where he was responsible for overseeing the company's system architectures, hardware design and software development teams. Additionally, he served as senior research scientist for the Naval Research Laboratory's high speed networking group, Center for Computational Sciences from 1992 to 2000.

Dr. Battou holds a PhD and MSEE in Electrical Engineering from the Catholic University of America.

#### **Title of the speech: Ongoing NIST researchs for next Internet generation**

**Abstract:** Information access is the dominant use case in today's Internet with more than 90% of Internet traffic being content retrieval (with video accounting for 60%, both user-generated and video-on-demand services). The Internet Protocol (IP) in today's Internet is built around a point-to-point communication model and is inefficient in solving content distribution problems. Future internet architectures based on the information-centric networking (ICN) paradigm propose to address ongoing challenges in supporting modern applications. These new architectures support the dissemination of named and signed data content natively at the network layer. Named Data Networking (NDN) is one such architecture that has a growing community of interest.

NIST is exploring the use of ICN-based technologies for an efficient next-generation Internet by researching associated protocols and measurements and plan to contribute to specifications of a standard implementation.