GW

Blockchain Technologies and Applications
Concept, Initiatives, Status, Problems, and Potential Solutions

Dr. Sead Muftic
CEO, BIX® System Corporation
Wednesday, February 19, 2020
4:30 – 6:00 pm

Science and Engineering Hall B1270

Blockchain technologies and their applications are very popular, but in the last several years there are also many problems and obstacles for their broader adoption. In this lecture, we will provide an overview of basic concepts and principles of peer-to-peer transactions and requirements for their execution and validation in an open environment. We will explain Bitcoin implementation and the current issues with the crypto currencies. Then, we will critically review distributed ledger concepts, blockchains and their protocols. Finally, we will analyze the challenges faced with the current implementations of blockchain, and outline an alternative optimal solution, called Bitcoin 2.0, an improved Bitcoin system.

Bio

Dr. Sead Muftic is working in the area of IT security for more than 40 years. He has Ph.D. degree in IT security from the OSU (1976). His long professional carrier includes academic activities, as full tenured professor at Stockholm University, Royal Institute of Technology, and GWU, expert and consulting activities with European Commission, Inter American Development Bank (IADB), The World Bank, Swedish International Development Agency, and design and development of secure IT systems in his companies: SETECS, Inc., BIX System Corporation, and BIXReal, Inc. For the last several years, prof. Muftic is working in the area of secure blockchain technologies and applications. With his team of his former Ph.D. and M.Sc. students he has developed several platforms – secure blockchain, security system for blockchains and applications, and secure payment system based on stable virtual coins. He has three US patents in these areas.

A special topic lecture for the Course CSCI 6548 E-Commerce Security course. To attend, please RSVP to Dr. Hurriyet Ok (hurriyetok@gwu.edu) by February 18, 2020.