TETAM PhD Seminars – 15.02.2018, 10:00-11:00
TETAM Roof Conference Hall

Title: A Dynamic Trust Proxy for SDN Controllers **(by Ömer Zekvan Yılmaz, 10:00-10:30)**

Abstract
With the growing sizes and increasing heterogeneity of communication systems, network administration has suffered from deployment and maintenance issues due to distributed nature of network devices. Software Defined Networking (SDN) paradigm is a solution for these issues where the network is divided into two different planes called control and forwarding planes. In this setting, controllers take place in the control plane and take the role of an intermediary medium between network applications and forwarding plane elements. In order to make sure that controllers operate in the desired manner, trust mechanism is used in a way that malfunctioning or adversary attack is tolerated up to a certain level. The literature, except for a few studies, is in lack of efficient methodologies and criterion that can decide whether a controller is trusted or not. In this project, in order to adopt to dynamic nature of networks, we provide dynamically changing confidence levels for controllers and evaluate the scalability of our solution up to a number of controllers.

Bio: Ömer Zekvan Yılmaz got his BSc. and MSc. degrees from Sabancı University Computer Science and Engineering in 2006 and 2009, respectively. Later, he worked at TÜBİTAK in Software Defined Radio project as a researcher. Since 2017, he is pursuing his PhD studies at Boğaziçi University. His research interests include Security and Virtualization in Software Defined Networks.

Title: Aspect Based Sentiment Analysis **(by Ali Erkan, 10:30-11:00)**

Abstract
Aspect Based Sentiment Analysis (ABSA) systems receive as input a set of texts (e.g., product reviews or messages from social media) discussing a particular entity (e.g., a new model of a mobile phone). The systems attempt to detect the main (e.g., the most frequently discussed) aspects (features) of the entity (e.g., 'battery', 'screen') and to estimate the average sentiment of the texts per aspect (e.g., how positive or negative the opinions are on average for each aspect). Several ABSA systems have been proposed include rules based methods or machine learning methods such as SVM, CRF and RNN.

Bio: Ali Erkan is a Ph.D. candidate in Computer Engineering at Boğaziçi University. He holds M.Sc in Software Engineering from Boğaziçi University and M.Sc. and B.Sc. in Industrial Engineering from Bilkent University. His Ph.D. studies focus on the natural language processing, machine learning, sentiment analysis. He has several years of experience as a software engineer in different companies.