

■ 논문요약문6

논문제목	Smartphone user segmentation based on app usage sequence with deep neural networks
게재정보	Telematics and Informatics, 35(2), 2018
개요	<p>The term user segmentation refers to classifying users into groups depending on their specific needs, characteristics, or behaviors. It is a key element of product development and marketing in many industries, such as the smartphone industry, which employs user segmentation to gather information about usage logs, to produce new products for such specific groups of users.</p> <p>However, previous studies on smartphone user segmentation have been primarily based on demographics and reported usage, which are inherently subjective and prone to skew by the observers and participants. Hamka et al. (2014) was the first to conduct a study, in which smartphone user segmentation was performed using log data collected through smartphone measurements. However, they focused only on network usage and the number of apps used, and not on characteristics or preferences.</p>
연구결과	<p>We compared the user segmentation results of the proposed method with an answer set of segmentation results conducted by domain experts. These experiments demonstrated that the proposed method effectively determines similarities between usage sequences and outperforms existing user segmentation methods.</p>
활용분야 및 기대효과	<p>In this study, we proposed novel ways of segmenting smartphone users based on app usage sequences collected from smartphone logs. We proposed a variant of seq2seq architecture combining the advantages of previous deep neural networks: neural embedding architecture and seq2seq architecture.</p>