Intensified Analysis and Comparison of 5 Flavivirus with the use of Decision Tree and Support Vector Machine(SVM)

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***Abstract*—Flavivirus is spreaded with the help of intermediary, especially mosquitoes. In preceding research, we found out that Leucine has high frequency. Wanting to know specific relationship between 5 flaviviruses ; Yellow fever, West Nile virus, Dengue virus, Tick borne encephalitis, decision tree and support vector machine algorithm were used. Analyzing results of the algorithms, difference or similarity about the viruses and a group as flavivirus were found.**

***Keyword*—Decision tree, Flavivirus, Support Vector Machine, Zika virus**

You Jin Yang was born in Gyeonggi, South Korea at July 20th, 1999. She is now in Hankuk Academy of Foreign Studies. She feels an interest in flavivirus especially zika virus and bio informatics. So based on a paper of analyzing 5 types of flavivirus using apriori algorithm which she wrote she writes another monograph. And it is about 5 types of flavivirus compared by decision tree and support vector machine

Bokyung Gu, She was born in Seoul, South Korea in 1999. She majors in science at Hankuk Academy of Foreign Studies. She is interested in viruses and bio-informatics. So in this research, she analysed 5 flavivirus by ussing decision tree algorithm and SVM algorithm.

Mr. Yoon was born in Seoul, Korea, in 1972. Hereceived the Ph.D. candidate degree in computereducation from the Korea University, Seoul, Korea, in2003. From 1998 to 2003, he was with EJB analystand SCJP. From 2003 to 2004, he joined theDepartment of Computer Education, University ofKorea, as a lecturer and Ansan University, as anadjunct professor. Since December 2004, he has beenwith the Hankuk Academy of Foreign Studies, where he was a computerscience and statistics teacher. He was the recipient of the Best TeacherAward of the Science Conference, Gyeonggi-Do, Korea, 2013.