

## **Fuzzy interpolation curve modelling of earthquake magnitude data**

### **ABSTRACT**

This research discussed on developing the fuzzy interpolation curve model which only used spline and B-spline functions in designing curve interpolation. The development of this model is used fuzzy set theory and more specifically fuzzy number concepts since the modeling problem is focused on modeling data. These data are known as uncertainty data and defined through fuzzy numbers which the properties of these data set belong to fuzzy numbers. There are also several steps to be implemented to obtain the crisp fuzzy model of crisp fuzzy data. These steps include fuzzification and defuzzification. For the fuzzification process which used alpha-cut triangular fuzzy numbers, an enhancement is also applied in process of determining the value of alpha based on the fuzzy data in triangular form. A numerical example is implemented to show the fuzzy interpolation curve modeling in which earthquake magnitude data are selected.