

SEMINARAS

2023 vasario 21 d. 09:00 SRL-I 420

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Streamflow Prediction Using Artificial Neural Network, adaptive neuro-fuzzy inference system and k nearest neighbor methods: Example of Gediz River Basin

Streamflow prediction is vital for water supply, irrigation, building water infrastructures, and taking precautions against floods. Forecasting future streamflow accurately helps us anticipate and plan for upcoming flooding, decreasing property destruction, preventing deaths, and managing water in the best way possible. Two types of models; Artificial Intelligence (AI) and Traditional models have been developed for streamflow prediction. Previous research shows that AI methods are more accurate compared to traditional methods. In my research, I will use three Artificial Intelligence models; K-Nearest Neighbor (KNN), Artificial Neural Network (ANN), and Adaptive Neuro-Fuzzy Inference System (ANFIS). I will use these models to predict streamflow of the Gediz River Basin (GRB), which is located in western Turkey. The GRB is crucial river basin of the nation, which provides water for animals, husbandry, agriculture, the textile industry, food industry, and mining. As it is an important river basin for the country, the river's water has to be predicted accurately in order to use it effectively.

In my presentation, I will talk about my research, duration of my ERASMUS, my purpose of being here at VILNIUS TECH, my expectation from ERASMUS, and so on.

**Kviečiame dalyvauti.
Seminaro sekretorius A. Bugajev**