

Automatic Irish Sign Language Recognition

Irene Hernández, Master of Science in Computer Science
University of Dublin, Trinity College, 2018

Supervisor: Aljoša Smolić

A deep learning approach to automatic Irish sign language recognition has not been thoroughly examined before. Two frameworks are introduced in this work: a convolutional neural network to extract spatial features and classify the 23 letters of the Irish sign language alphabet that do not incorporate motion, and a convolutional neural network with a multi-stream input channel and three-dimensional filters in order to detect spatio-temporal features and classify 8 dynamic gestures in Irish Sign Language.