Machine Learning Based Gender Identification of Authors of Entry Programs

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Abstract : Entry is an education platform used in South Korea, created to help students learn to program, in which they can learn to code while playing. Using the online version of the entry, teachers can easily assign programming homework to the student and the students can make programs simply by linking programming blocks. However, the programs may be made by others, so that the authors of the programs should be identified. In this paper, as the first step toward author identification of entry programs, we present an artificial neural network based classification approach to identify genders of authors of a program written in an entry. A neural network has been trained from labeled training data that we have collected. Our result in progress, although preliminary, shows that the proposed approach could be feasible to be applied to the online version of entry for gender identification of authors. As future work, we will first use a machine learning technique for age identification of entry programs, which would be the second step toward the author identification.

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