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題名	Two-stage Deep Neural Network for General Object Detection
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概要	In the present paper, we propose a deep network architecture in order to improve the accuracy of general object detection. The proposed method contains a proposal network and a classification network, which are trained separately. The proposal network is trained to extract a set of object candidates. These object candidates cover not only most object ground truths but also a number of false positives. In order to make the detector more robust, we train these object candidates using a secondary classifier. We propose combination methods and prove that a combination of two networks is more accurate than a single network. Moreover, we determine a new method by which to optimize the final combination results. We evaluate the proposed model using several object detection datasets (Caltech pedestrian, Pascal VOC, and COCO) and present results for comparison.