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## SOA-COMPLIANT PROGRAMMING MODEL FOR INTELLIGENT SENSOR NETWORKS - SCA-BASED SOLUTION

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**ABSTRACT.** The role of intelligent sensor networks has been growing rapidly over the past years. New sensor devices such as Sun SPOT or Sentilla are equipped with processors capable of running the JVM machine. This opens new possibilities for full integration of such devices with enterprise applications and also for extending their programming models to cover sensor networks. A uniform programming model shared between sensor networks and standard computers would bring numerous benefits. The paper presents an extension of the SCA programming model to include intelligent sensors. The architecture of such an extension is proposed and an initial prototype implementation is presented. The solution utilizes a proxy pattern, validated by a simple case study using Sun SPOTs and Sentilla. The advantages and limitations of the proposed extension are also discussed.