

# Web Shopping Support System for Elderly People using WebRTC

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**Abstract**—An increase in elderly shopping refugees is considered as a serious social problem. Therefore, this paper proposes a new web shopping support system for the elderly shopping refugees. Features of the proposed system are 1) to use WebRTC for synchronizing displayed web pages instead of a centralized proxy server, 2) setup procedures of end-to-end communication through NAT devices by utilizing a general mail service, 3) a mutual authentication method using video streaming of the WebRTC technology, and 4) remote assistance methods for teaching shopping refugees how to use EC sites. Evaluation of the proposed methods has shown that the WebRTC technology and the proposed remote assistance methods are effective for the web shopping support.

**Keyword**— Browsers Synchronization, WebRTC, Shopping Refugee, NAT Traversal, HTML5



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