

**DESIGNING A DIGITAL MEMORY
ASSISTANT**

FOR THE SECURITY SERVICES



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ABSTRACT

This dissertation details the design and prototyping of a computer based memory assistant for the security services. Three organisations are studied, concluding that the situation of concern is two-fold. Firstly the security officers need very rapid access to door and alarm codes, and directions within buildings. Secondly they need assistance in accurately recalling incidents in order to produce written reports.

The aim of this project is to design a wearable device that gives relevant codes and directions based on the users location at the press of one button, and automatically captures pictures, sounds and locations at relevant times, allowing their review at a later date on a PC or Mac.

The system is designed on the basis of extensive user interviews. The software for reviewing the captured information has been prototyped both on paper and using HTML. A video has been produced of a mock incident to provide data for evaluating the prototypes. The software has been validated with the users and has undergone a heuristic evaluation. The results are very promising, with no changes to the basic design. Several improvements have been suggested - one of them major - and suggestions are given as to how these will be addressed.

The users like the design very much, and would like to have the finished system. It is hoped that the system will eventually be developed into a commercial product.