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Boon Kee, Soh

Objective

I aspire to conduct research in Human Factors Engineering particularly in cognitive ergonomics and user interface design of complex systems.

Experience

1996-2001   Defence Medical Research Institute   Singapore

Research Engineer, Human Factors Branch

- Defence Medical and Research Institute is part of the Defence Science and Technology Agency of Singapore. It is a premier research institute spearheading human research in Singapore Ministry of Defence.
- Conducted research in biodynamic of pilots under extreme conditions
- Evaluation of wearable computers interface in military applications
- Electronic manual interface design in vehicle maintenance
- Human Factors Testing and Evaluation of vehicular workstations
- Microclimate cooling research

1989–1991, 1995-1996   National Service in Ministry of Defence   Singapore

Armor Scout, 40SAR

- Served as an Armor Scout commander
- Trained in Armor operations and vehicles

Education

2001-present   Virginia Tech   Blacksburg, VA

- Master of Science, ISE, Human Factors Engineering
- Planning to continue for PhD after the Master Program

1991-1995   Nanyang Technological University   Singapore

- Bachelor of Engineering, Mechanical and Production Engineering
- 2nd Class Upper Honors

Thesis

Developing outdoor map design guidelines using a real-world wayfinding task

- This research involved a field study in an outdoor area using different formats of maps to determine the variables that affect wayfinding performance
- Three different contour representations with two color coding were used in actual wayfinding in a forest trail park
- Individual differences such as experience level, gender, cultural difference, and handedness were accounted in the study
- Sign presence was considered as a likely predictor of performance as an environmental cue aiding user of maps
- The multiple regression analyses was used to predict wayfinding performance due to the seven predictor variables (contour, color, experience level, gender, cultural difference, handedness, and sign presence)
- Video data was collected during the trial where participants used think aloud and retrospective protocols, to obtain mental models of the participants during

wayfinding

- Qualitative data from retrospective protocols were obtained to elucidate the information acquired by the users and the strategies used for decision making
- User preferences were also elicited through questionnaires after completion of the experiment

Technical Skills	Generally proficient with computer software, programming, web, computer hardware, and computer simulation - Conversant in programming using Visual Basic, and C - Conversant with general office and graphics software such as Microsoft Office, Dreamweaver, Adobe Photoshop, Freehand, Illustrator, Painter - Statistical Packages: Minitab, SPSS, and SAS - Human modeling software such as Safework and Jack - Conversant with CAD software: AutoCAD, Mechanical Desktop, and Solidwork - Familiar with 3D Studio, Carrara, and Visual C++
Interests	Computers, jogging, music, nature, travel, family
Professional Membership	ASSE Student Member, HFES Student Member
Awards received	Public Commission Service Scholarship, DSTA Scholarship, Kenneth J. Deurmier Safety Scholarship