1. Record Nr. UNINA9910488716103321 Human interface and the management of information . Part I: **Titolo** information presentation and visualization: thematic area, HIMI 2021, held as part of the 23rd HCI International Conference, HCII 2021 virtual event, July 24-29, 2021, proceedings / / Sakae Yamamoto, Hirohiko Mori (editors) Cham, Switzerland:,: Springer,, [2021] Pubbl/distr/stampa ©2021 **ISBN** 3-030-78321-9 Descrizione fisica 1 online resource (417 pages) Lecture Notes in Computer Science; ; v.12765 Collana Disciplina 004.019 Soggetti Human-computer interaction Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia

Nota di contenuto

Intro -- Foreword -- HCI International 2021 Thematic Areas and Affiliated Conferences -- Contents - Part I -- Contents - Part II --Information Presentation -- The Use of New Presentation Technologies in Electronic Sales Environments and Their Influence on Product Perception -- 1 Introduction -- 2 Materials and Methods -- 2.1 Development of the Study -- 2.2 Analysis of Results -- 3 Results -- 4 Discussion -- 5 Conclusions -- References -- Research on Conveying User Experiences Through Digital Advertisement -- 1 Introduction -- 2 Methods -- 2.1 Conveyance of the UX Evaluation Experiment Using Digital Advertisements -- 2.2 Extracting Objective Features and Categorizing Advertisement Samples -- 2.3 Designing and Building Models -- 3 Results -- 3.1 Analysis of UX Evaluation Items -- 3.2 Analysis of General Evaluation Criteria -- 4 Discussion -- 5 Conclusion -- References -- Preventing Decision Fatigue with Aesthetically Engaging Information Buttons -- 1 Introduction -- 2 Background and Related Works -- 3 Methodology -- 3.1 Participants -- 3.2 Apparatus -- 3.3 Procedure -- 3.4 Design -- 4 Experimental Results -- 4.1 Dependent Variable Analysis -- 5 Conclusion and Future Works --References -- A Modeling Research on How to Solve Ventilator Alarms from Behavioral and Cognitive Perspectives -- 1 Introduction -- 2

Objective -- 3 Methods -- 3.1 Participants and the Equipment -- 3.2 Simulation Status of the Experimental Equipment -- 3.3 About Alarms that Happen -- 3.4 How to Get the Data -- 4 Results and Discussions -- 4.1 Behavioral Transitions of Participants -- 4.2 Verbal Protocol Data and Interview Analysis -- 4.3 Characteristics of the Cognitive Model of SG -- 4.4 Characteristics of the Cognitive Model of IG -- 4.5 Clinical Special Situations -- 5 Application and Prospects of Cognitive Models -- 6 Conclusions -- Notes -- References. Evaluating Digital Nudging Effectiveness Using Alternative Questionnaires Design -- 1 Introduction -- 2 Literature Review -- 3 Tools and Participants -- 3.1 Nudging Through Emotion-Evoking Photographs -- 3.2 Nudging Through Default Options -- 3.3 Nudging Through Text -- 3.4 Nudging Through Different Levels of Answers --3.5 Nudge Based on the Vote of the Majority -- 4 Results and Discussion -- 4.1 Results from Nudging Through Emotion-Evoking Photographs -- 4.2 Results from Nudging Through Default Options --4.3 Results from Nudging Through Text -- 4.4 Results from Nudging Through Different Levels of Answers -- 4.5 Results from Nudge Based on the Vote of the Majority -- 5 Summary and Future Work --References -- Cultivation System of Search-Query-Setting Skill by Visualizing Search Results -- 1 Introduction -- 2 Approach for Cultivating Search-Query-Setting Skill -- 2.1 Information Retrieval Process -- 2.2 Contents of Search Results Page -- 2.3 Search-Query-Setting Skill -- 2.4 Support System for Cultivating Search-Query-Setting Skill -- 3 Topic Extraction Function -- 4 Search-Result-Visualization Function -- 5 Prototype System -- 6 Evaluation Experiment -- 6.1 Experimental Setting -- 7 Conclusion -- References -- A Support Interface for Remembering Events in Novels by Visualizing Time-Series Information of Characters and Their Existing Places -- 1 Introduction -- 2 Related Work -- 2.1 Remembering Support System --2.2 Support for Reading Long Novels -- 3 Proposed Interface -- 3.1 Extraction of Phrases for Character Names and Places -- 3.2 Estimation of Existing Places for Each Character -- 3.3 Visualization of Time-Series Information of Characters and Their Existing Places -- 4 Evaluation Experiments -- 4.1 Experimental Procedures -- 4.2 Evaluation Method -- 4.3 Experimental Results -- 5 Discussion -- 6 Conclusion and Future Work -- References. Experimental Evaluation of Auditory Human Interface for Radiation Awareness Based on Different Acoustic Features -- 1 Introduction -- 2 Design of Alarm with Acoustic Features -- 2.1 Selection of Sensation --2.2 Acoustic Features -- 2.3 Auditory Alarm Design -- 3 Experiment --3.1 Experiment Outline -- 3.2 Experiment Period and Participants --3.3 Experimental Procedure -- 3.4 Virtual Radiation Distribution -- 3.5 Experiment Flow -- 4 Experiment Result -- 4.1 Radiation Exposure --4.2 Time Consumption -- 4.3 Trace Analysis -- 5 Conclusion --References -- Comprehending Research Article in Minutes: A User Study of Reading Computer Generated Summary for Young Researchers -- 1 Introduction -- 2 Related Work -- 3 Automatic Summarization System -- 4 User Study -- 4.1 Experimental Setting -- 4.2 Result -- 5 Conclusion -- References -- Possibility of Reading Notes as Media to Enrich Communications Between Reader and Book -- 1 Introduction -- 2 Creation of Reading Notes as Media -- 2.1 Importance and Application of Communication -- 2.2 Problem of Reading as "Communication Between a Reader and a Book" -- 2.3 Reading Notes as Media -- 2.4 Gaze Information During Reading -- 2.5 Automatic Reading Notes Creating System -- 2.6 Automatic Reading Notes Creating System -- 3 Related Research -- 4 Experiment -- 4.1 Eye Tracker -- 4.2 Reading Patterns -- 4.3 Document for Experiment

-- 5 Results and Discussion -- 6 Conclusion -- References -- Notification Timing Control While Reading Text Information -- 1 Introduction -- 2 Related Work -- 2.1 Effects of Notifications on Productivity -- 2.2 Breakpoint -- 2.3 Eye Blink -- 2.4 Notification System Approach -- 3 Method -- 3.1 Notification Timing Control for Reading Text Information -- 3.2 System to Detect Eye Blinking Frequency -- 3.3 System to Control Notifications -- 4 Evaluation Experiment -- 4.1 Purpose.

4.2 Experiment Description -- 4.3 Evaluation Method -- 4.4 Results --4.5 Degree of Concentration During Reading -- 4.6 Stress Level Owing to Notification Screen or Sound -- 5 Discussion -- 5.1 Impact of Notification Timing Control on the Reading Experience -- 5.2 Notification and Article Contents -- 5.3 Breakpoint and Blinking Frequency Detection -- 6 Conclusions -- References -- Visualization and Decision-Making Support -- Designing Data Visualization Dashboards to Support the Prediction of Congenital Anomalies -- 1 Introduction -- 2 Background and Related Work -- 2.1 Information Visualization and Dashboards -- 2.2 Related Work -- 3 Design and Development Method -- 4 Prototype and Preliminary Study -- 4.1 CAPDashboards Prototype Description -- 4.2 Preliminary Study -- 4.3 Preliminary Study Results -- 5 Conclusion -- References -- Improving User Experience Through Recommendation Message Design: A Systematic Literature Review of Extant Literature on Recommender Systems and Message Design -- 1 Introduction -- 2 Research Methodology -- 3 Analysis and Results -- 3.1 RQ1 What Comprises the Current Knowledge Base of the Antecedents to Effective RS Message Design? -- 3.2 RQ2 What Statistically Significant Results from Past Research Can Inform Current Scholars and Practitioners of Optimal RS Message Design Practices? -- 3.3 RQ3 What Are Opportunities for Future Research Subsequently Potentially Revealing Guidelines on How to Optimize RS Message Design in a Managerial Decision-Making Context? -- 4 Discussion and Concluding Comments --References -- Research on Innovative Application Mode of Human-Computer Interaction Design in Data Journalism -- 1 Introduction -- 2 Advantages of Human-Computer Interaction Design -- 3 Current Status and Shortcomings of Human-Computer Interaction Design in Data Journalism.

4 The Emergence of New Technologies Promotes Continuous Upgrading of Human-Computer Interaction Technology -- 5 Innovative Application Models of Human-Computer Interaction Design in Data Journalism -- 6 Conclusion -- References -- Evaluating the Impact of Algorithm Confidence Ratings on Human Decision Making in Visual Search -- 1 Introduction -- 2 Method -- 2.1 Participants -- 2.2 Stimuli -- 2.3 Procedure -- 3 Results -- 3.1 Effect of Confidence on Accuracy for Target Present vs. Target Absent Trials -- 3.2 Effect of Confidence Values on Responses Over Time -- 3.3 Effect of Confidence Values on Perception of Model Accuracy -- 4 Discussion -- 5 Conclusion --References -- NearMe: Dynamic Exploration of Geographical Areas -- 1 Introduction -- 2 Background and Related Work -- 2.1 Geographic Information Search Support -- 2.2 Map-Based Information Visualization -- 3 NearMe -- 4 Validation Methodology -- 5 Results -- 5.1 Data About Participants -- 5.2 User Experience Results -- 6 Conclusions --References -- Decision Support for Prolonged, and Tactical Combat Casualty Care -- 1 Introduction -- 2 Background -- 3 Methods -- 3.1 Design Requirements Reviews -- 3.2 Field Usability Assessments -- 3.3 Shock Model Silent Test -- 4 Discussion -- 5 Summary -- References -- Lessons Learned from Applying Requirements and Design Techniques in the Development of a Machine Learning System for

Predicting Lawsuits Against Power Companies -- 1 Introduction -- 2
Background -- 2.1 ML Systems Development Process -- 2.2
Techniques for Requirements Elicitation and Design -- 3 The ML
System for Predicting and Dealing Lawsuits -- 3.1 Application Context
-- 3.2 Characterization of the Project -- 4 The Requirements
Engineering and Design Processes -- 4.1 Document Analysis and
Scenarios -- 4.2 Personas and Prototype Proposal -- 4.3 Validation
Interviews.

5 Discussion and Lessons Learned.