

# Human-Computer Interaction Design for Emerging Technologies

Gangavva G Kudarikannur<sup>1</sup>, Priyanka Shet<sup>2</sup>, Dr. Madhusudhan S<sup>3</sup>

Students, Department of Computer Science and Engineering<sup>1,2</sup>

Associate Professor, Department of Computer Science and Engineering<sup>3</sup>

Alva's Institute of Engineering and Technology, Mangalore, India

gangakudarikannur@gmail.com<sup>1</sup>, priyanka2001pink@gmail.com<sup>2</sup>, madhusudhan@aiet.org.in<sup>3</sup>

**Abstract:** *This article presents a multifaceted case for the inclusion of the important Human-Computer Interaction (HCI) subject matter at both the graduate and undergraduate levels of the Association of Information Systems (AIS) model curricula. Based on the presentations and discussions during a panel at the 2003 Americas Conference on Information Systems (AMCIS), we first present the rationale for incorporating HCI materials in Management Information Systems (MIS) curricula. Second, we present a list of relevant and important HCI knowledge and skills that our students need for effective careers. Third, given the limited number of credit hours available to each MIS program, we explore several strategies and options for the integration of HCI into current and future MIS courses. Finally, drawing upon teaching experiences of the authors, we provide pedagogical suggestions for teaching HCI to undergraduate and graduate students.*

**Keywords:** Mixed Methods Research, Human-computer Interaction, Resilience, Resilience Strategies, Technology, Artefacts, Information Systems  
Keywords: Mixed Methods Research, Human-computer Interaction, Resilience, Resilience Strategies, Technology, Artefacts, Information Systems.

## REFERENCES

- [1]. E. Beinhocker, E. Beinhocker, E. Beinhocker, E (1999), Adaptive tactics that are robust. 95-106 in the Sloan Management Review, Vol. 40(3).
- [2]. R. Bhamra, S. Dani, and K. Burnard (2011). The notion of resilience, a review of the research, and future directions 5375–5393 in International Journal of Production Research, 49(18).
- [3]. The Accentism Project was launched in 2018. Accentism Project is a project dedicated to the study of accents. [https://accentism.org/\[2\]](https://accentism.org/[2]) 2018. Adapt Centre. The Google Faculty Research Award was given to ADAPT Associate Professor as the only Irish recipient.
- [4]. <https://www.adaptcentre.ie/news/\sadapt-associate-professor-sole-irish-recipient-of-the-google-faculty-research-award-2018>. Amazon, year 2018. Alexa & Echo Devices <https://www.amazon.co.uk/b?ie=UTF8&node=1410022303>.
- [5]. C. Adams and J.B. Nash: Design thinking approaches in evaluation. 12–17 in J. Multi. Eval. 12 (26). (2016). A survey of the HCI literature in IS: the missing linkages of computer-mediated communication, culture, and interaction.
- [6]. Agrawal, A., Boese, M.J., and Sarker, S. p. 523 in AMCIS (2010). \* 3. D. Akoumianakis & C. Stephanidis: Universal design in human-computer interaction: a critical evaluation of current research and practise. 754 in Engineering and Construction (1989).
- [7]. S. W. Axelsson and A. M. Wikman (2016). You're all set for eHealth. The PIADS Scale as a Predictor of Readiness for Older Swedes' Perceptions of eHealth Services 4 TECHNOLOGIES (3).
- [8]. J. Barnes (2018). 2016 edition of The Literature Review: Six Steps to Success. 10(2), 117, AU-GSB e-JOURNAL.
- [9]. N. Bhatnagar, H. Madden, and Y. Levy (2017). Initial research into the elements that influence patient use of secure medical teleconferencing. 89-95 in Journal of Computer Information Systems.
- [10]. These links were active at the time of writing, but they are not guaranteed to work in the future.
- [11]. Web page content is subject to change over time. Different versions may not have the information or conclusions mentioned where version information is supplied in the References.

- [12]. The accuracy of the content of the Web sites is the responsibility of the writers, not CAIS.
- [13]. K. Baker, S. Greenberg, and C. Gutwin. 2002. A heuristic evaluation mechanism for shared workspace groupware has been empirically developed. In *Proceedings of the 2002 ACM Conference on Computer Supported Cooperative Work (November 16-20, 2002, New Orleans, Louisiana, USA)*. ACM Press, New York, NY, 96-105, CSCW '02.
- [14]. <http://portal.acm.org/citation.cfm?doi=587078.587093>
- [15]. Tasks for and tasks in human-computer interaction, Dan Diaper and Colston Sanger, *Interacting with Computers* 18 (2006) 117–138 [www.elsevier.com/locate/intcom](http://www.elsevier.com/locate/intcom)
- [16]. *Human Computer Interaction*, 2nd ed., Prentice Hall, ISBN 0-13- 239864-8, Dix, A., Finlay, J., Abowd, G. D., and Beale, R.
- [17]. *Agents: Recognition and Interaction Models*, G. Abowd. *Human-Computer Interaction - Proceedings INTERACT'90*, edited by D. Diaper, D. Gilmore, G. Cockton, and B. Shackel, pages 143-146.
- [18]. Amsterdam: North-Holland, 1990.
- [19]. A. Monk, H. Wang, and G. Abowd. A formal method for developing automated communication. Pages [19] 219-226 in *Designing Interactive Systems - DIS'95 Proceedings*. New York: ACM Press, 1995.
- [20]. Webflow.com is a website that allows you to create your own website (2019). *Webflow Blog | The Benefits and Drawbacks of Icons in Web Design [online]*
- [21]. <https://webflow.com/blog/the-benefits-and-drawbacks-of-icons-in-web-design> [Accessed on January 29, 2019] .
- [22]. Anonymous (2019). [online] Visit <https://www.udemy.com/> for more information. [Accessed on January 29, 2019]
- [23]. E. Beinhocker, E. Beinhocker, E. Beinhocker, E (1999), Adaptive tactics that are robust. 95-106 in the *Sloan Management Review*, Vol. 40(3).
- [24]. R. Bhamra, S. Dani, and K. Burnard (2011). The notion of resilience, a review of the research, and future directions 5375–5393 in *International Journal of Production Research*, 49(18).
- [25]. H. Boyes, H. Boyes, and H. Boyes, H. Boyes, H. Boyes, H. Boyes, H. Boyes, H. Boyes, H. Boyes, H. Boyes, H. Boyes, H. Boyes, H. Boyes, H. Boyes, H. Boyes,
- [26]. *Agents: Recognition and Interaction Models*, G. Abowd. *Human-Computer Interaction - Proceedings INTERACT'90*, edited by D. Diaper, D. Gilmore, G. Cockton, and B. Shackel, pages 143-146. Amsterdam: North-Holland, 1990.