HCI Fundamentals

Gerard Jounghyun Kim's "Human-Computer Interaction: Fundamentals and Practice" offers some crucial HCI insights, taking into account human needs and technology for optimal performance.

The book lists various key principles, some of which include:

- Designing interactive systems taht revolve around the needs, goals, and preferences of users, also known as user-centered design. Involving users throughout the design process is key to creating a system that is both effective and usable.
- Users should be able to perform tasks efficiently and effectively, which means the system should be easy to learn and use.
- Users should receive regular feedback regarding the status of their actions and task progress to keep them engaged without becoming frustrated. Maintaining engagement requires a prompt response time.
- The behavior, language and interface design must be consistent across varying contexts and tasks for the system to operate effectively.
- Users with varying abilities must be able to access the system effectively, which means accommodating limitations and disabilities. This involves designing with assistive technologies in mind and taking into account the diverse needs of users.
- Engagement and satisfaction are improved when the system is visually pleasing and enjoyable to use, making aesthetics a key factor.
- Tasks, goals, and environment all must be taken into account when designing a system, with special attention given to its context and how it will be utilized by the user.

In addition to these principles, the book also discusses various human and technological factors that can affect HCI performance, such as cognitive load, attention, memory, display technology, input devices, and network latency.

Kim, G. J. (2015). *Human-computer interaction: fundamentals and practice*. CRC press. Retrieved from https://books.google.com.mx/books?hl=en&lr=&id=D4SbBgAAQBAJ&oi=fnd&pg=PP1&dq=HCI+fundamentals&ots=8pI79VNddm&sig=iVSdhxFtUmM2hWva0IF4gL3ljQI&redir_esc=y#v=onepage&q=HCI%20fundamentals&f=false