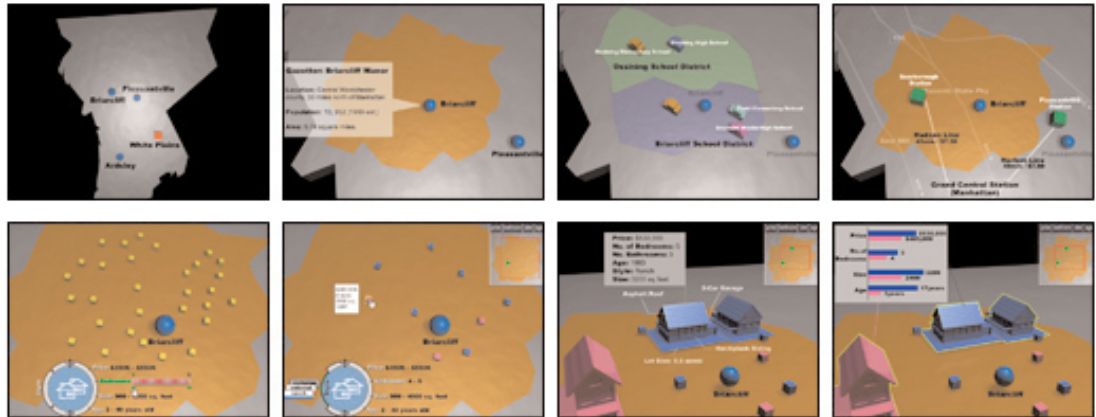# Portfolio | Joonhwan Lee

INTERACTION DESIGN

Responsive Information Architect

2000, IBM T.J. WATSON RESEARCH CENTER

Imagine being able to obtain information, not through an assortment of independently pre-designed web sites, but rather through an intelligent multimedia conversation that is tailored to the task you are performing, customized to your personal preferences, and adapted to your context and interaction devices. To realize this vision, we designed an exploratory system called the Responsive Information Architect that engages users in automatically generated interactive multimedia, multi-modal conversations. In particular, we utilize a combination of knowledge-based planning and machine learning approaches to dynamically determine the contents of the response, to select the suitable media to encode the contents, and then to automatically compose coordinated multimedia streams with embedded interaction controls. The process exploits domain-independent knowledge about the presentation generation and interaction, as well as domain-specific knowledge about the data and user tasks/roles.

Family Paper
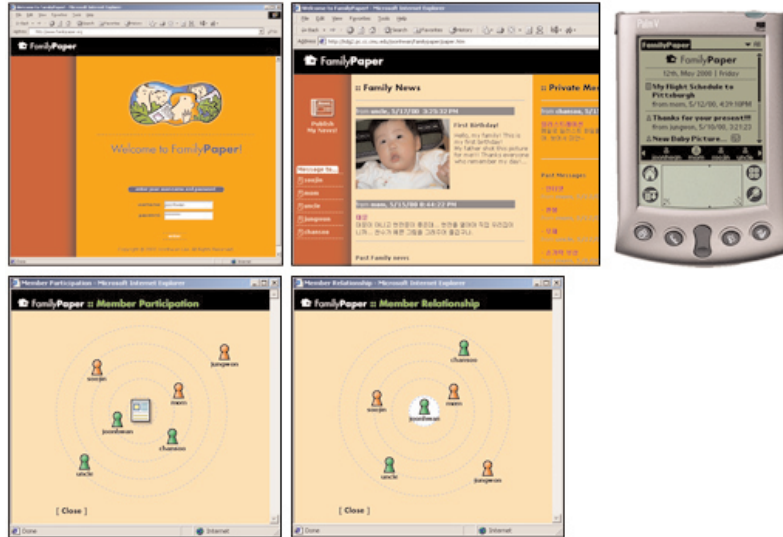
2000, CARNEGIE MELLON UNIVERSITY

Designed a computer-mediated communication space for families whose members are living in dispersed places. This space would help maintain mutual interaction among the family members who are apart, better the awareness of time and space, and enhance family relationships through computer-mediated communication.
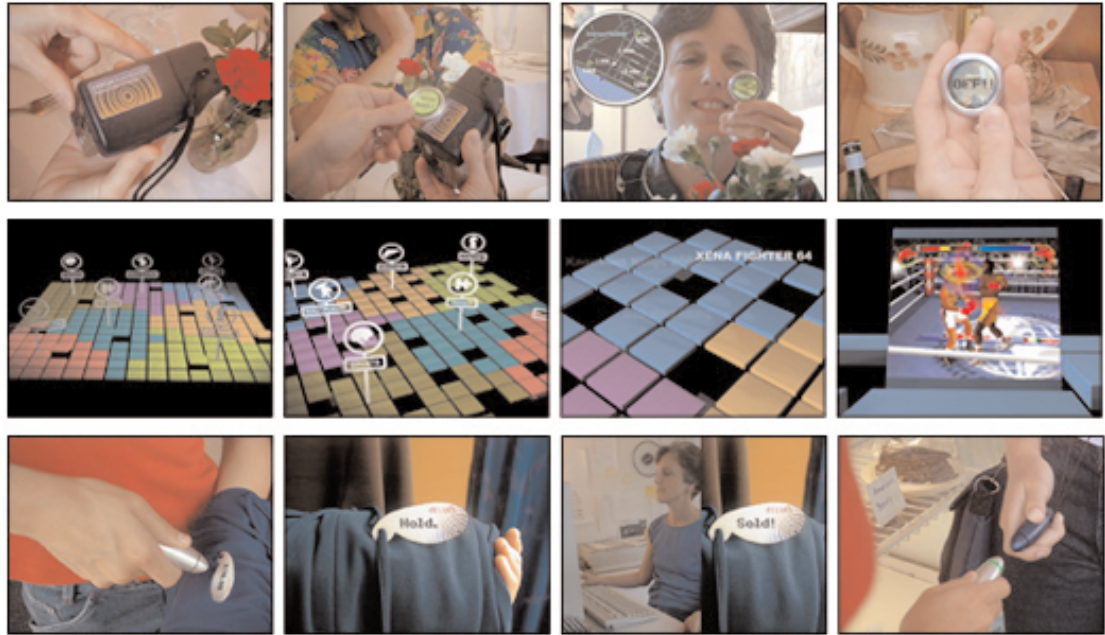
Beyond Buttons! New Modalities
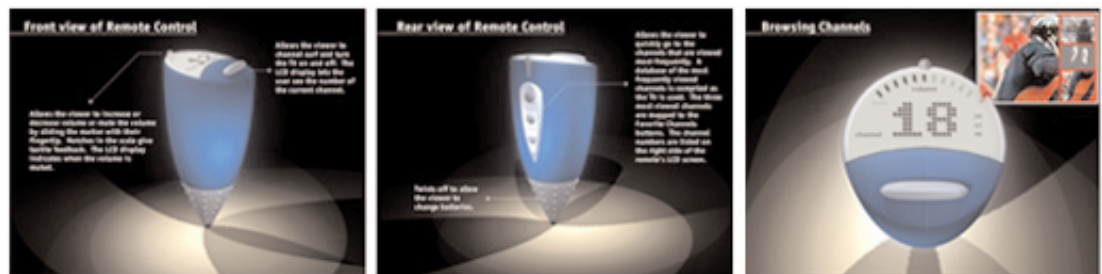
1999, CARNEGIE MELLON UNIVERSITY

Designed a hand-held device that functions as a remote control without having conventional buttons.

NCR e-commerce Project

1999, NCR KNOWLEDGE LAB. & CARNEGIE MELLON UNIVERSITY

In this project, we created 3 scenarios in prospect of how technology will change social patterns of shopping.
The first scenario utilizes invisible technology such as digital tagging and GPS tracking system. This technology will work as an invisible shopping agent.
The second scenario utilizes personalized natural language dialog when purchasing a game for children. The shopping agent learns and tracks preferences of family members and friends and suggests a product to a customer through multi-modal dialog.
In the third scenario, the customers are teenagers, and they share their shopping information with their parents. The device used to store shopping information also can be used as a digital wallet.

Asynchronous Collaborative Workspace

1998, CARNEGIE MELLON UNIVERSITY

Designed an asynchronous collaborative workspace for a group of people who are working in a disperse space. This browser can track people's work progress, assignment and also support communication.

Course Information System

1998, CARNEGIE MELLON UNIVERSITY

Designed a course information system for teachers. They can add and browse roasters of a course and each student information including grade.
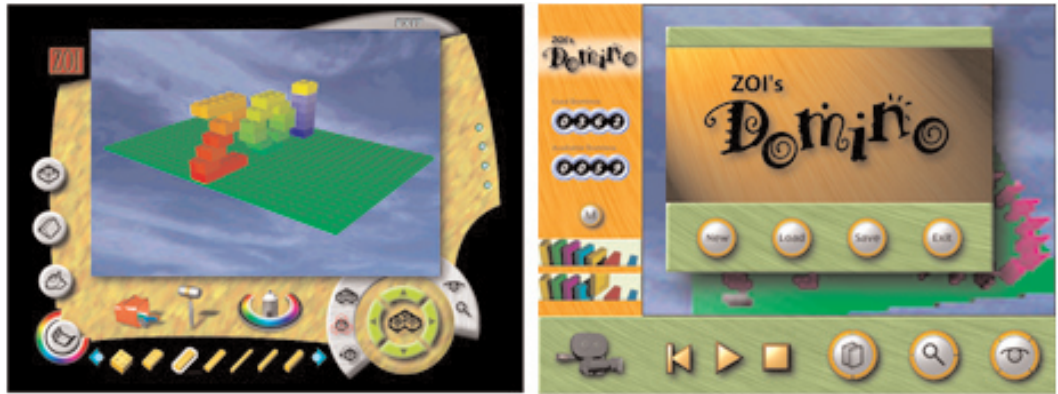
CD-ROM Title Design for 50th Anniversary of Seoul National University

1996, IMAGEDROME & SEOUL NATIONAL UNIVERSITY

3D Block Game User Interface Design

1997, ZOI COMM

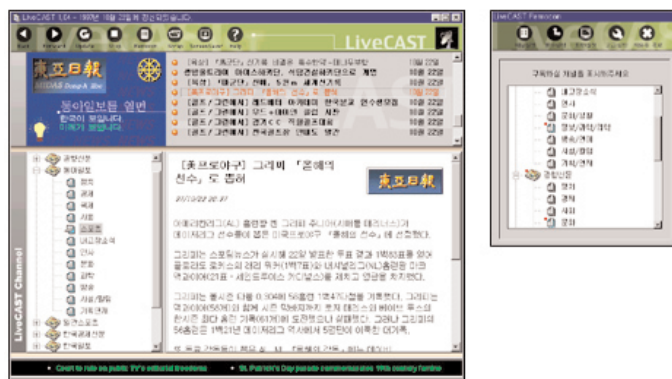Designed graphic user interface of 3D block games.

Movie Database User Interface Design

1996, IMAGEDROME & DIGITAL CHOSUN

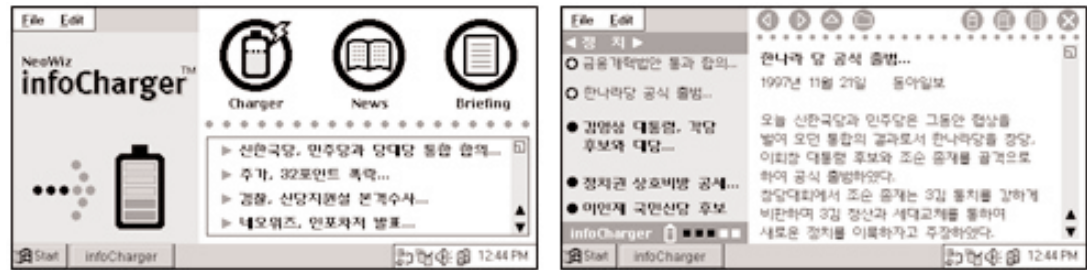Interface design for Digital Chosun's movie database.

NeoWiz LiveCAST Interface Design

1997, NEOWIZ

Interface design of NeoWiz's internet push software, "LiveCAST"

NeoWiz InfoCharger Interface Design

1997, NEOWIZ

Interface design of NeoWiz's internet push software for Windows CE device

Game Labylintos

1995, ALCHEMIST

Designed 3D adventure game - character design, product design and 3D animation.
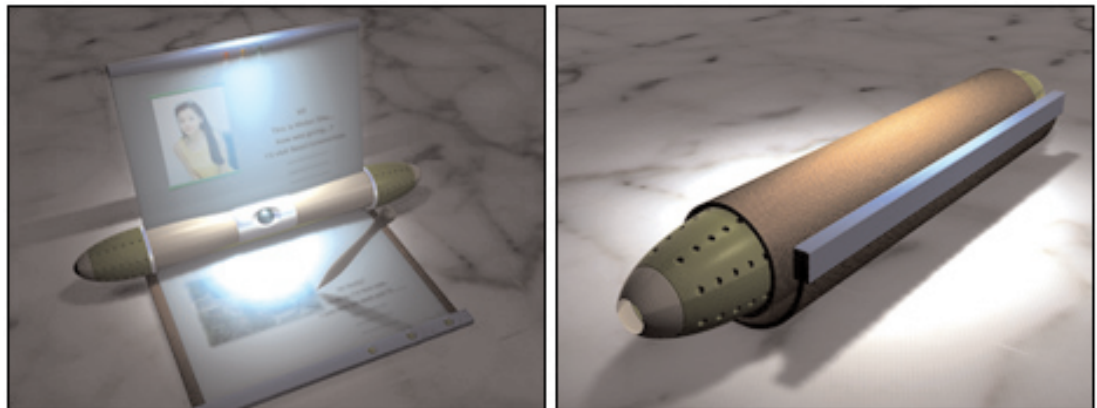
PRODUCT DESIGN

Personal Information Assistant Design

1994, SEOUL NATIONAL UNIVERSITY

Information appliance in the form of a camera, electronic diary and communication device connected.
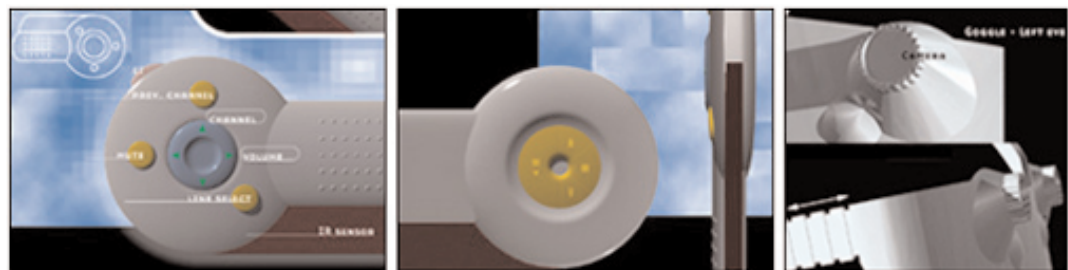
Mobile Communicator

1997, SEOUL NATIONAL UNIVERSITY

Scriptable communicator focused on mobility.

Interface design for headgear type projector manipulation

1996, SEOUL NATIONAL UNIVERSITY

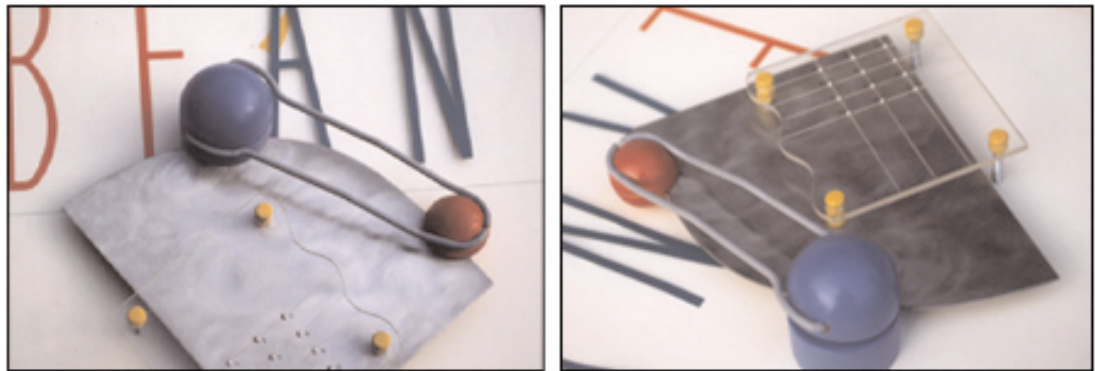Interface Design for headgear type projector manipulation.

TV and Remote Control User Interface Design

1993, DAEWOO ELECTRONICS AND SEOUL NATIONAL UNIVERSITY

In this design, only 3-buttons were used for manipulating TV.
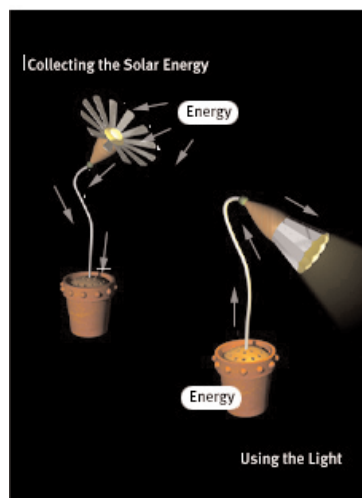(Sponsored by Daewoo Electronics)

Telephone Design

1991, SEOUL NATIONAL UNIVERSITY

Tried to express the strict and hard industrialized society and the transparency of communication by using metal and glass.

Lighting Design - the Sunflower

1993, SEOUL NATIONAL UNIVERSITY

The light to use the solar energy saved in the daytime. It's top spread in the daytime for collecting the solar energy.
This idea is originated in the lift style of Sun Flower.
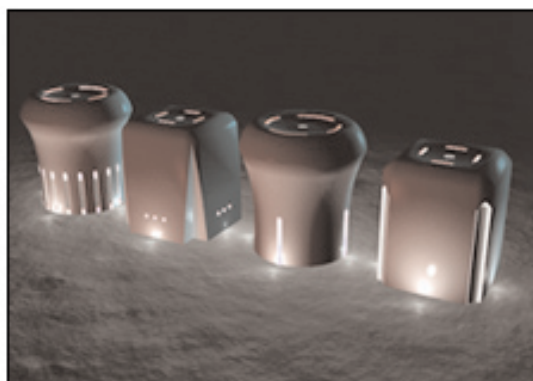*Honorable mentions at Koizumi International Lighting Competition.*

Lighting Design

1991, SEOUL NATIONAL UNIVERSITY

Street Furniture Design for Riverside

1993, SEOUL NATIONAL UNIVERSITY

Stool design for riverside. The light turn on at night to indicate the border line between water and road.

GRAPHIC DESIGN

Visualizing information space

1998, CARNEGIE MELLON UNIVERSITY.

Visualize information space of the book, "VizAbility".

Magazine Cover Design

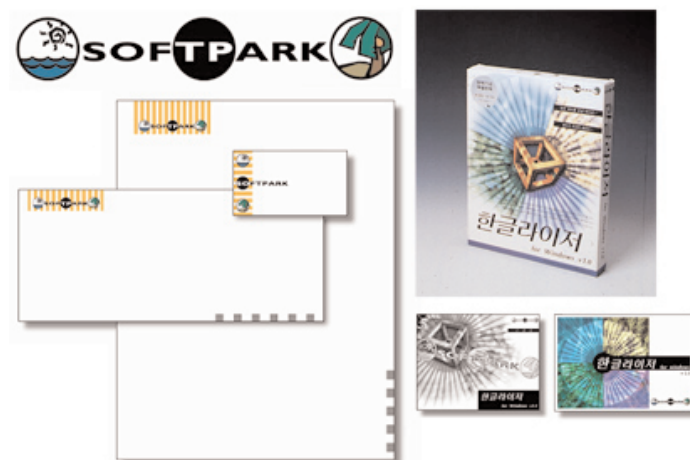1997, "SHINBIRO", HYUNDAI INFORMATION TECHNOLOGY INC.

IBM Korea "EnKor"

1995, IBM KOREA

User interface, package, and brochure design for English-Korean translation application, "EnKor"

Softpark Co. CI & BI

1993, SOFTPARK

CI, BI and manufacturing package design for Softpark Co.

Editorial Design - Self Promotion

1993, SEOUL NATIONAL UNIVERSITY

Journal Cover Design

1997, THE SOCIETY OF NAVAL ARCHITECTS OF KOREA.

Poster Design

1997, SEOUL NATIONAL UNIVERSITY PHILHARMONIC ORCHESTRA