SILVER – An Intelligent Video Editor
Silver is an authoring tool that aims to allow novice users to edit digital video. The goal is to make editing of digital video as easy as text editing. Silver provides multiple coordinated views, including project, outline, subject, storyboard, textual transcript and timeline views. Selections and edits in any view are synchronized with all other views. A variety of recognition algorithms are applied to the video and audio content and then are used to aid in the editing tasks. The recognition algorithms and metadata used to support intelligent editing are supplied by the Informedia Digital Library, which also serves as the repository and search mechanism. The metadata includes shot boundaries and a time-synchronized transcript, which are used to support intelligent selection and intelligent cut/copy/paste. by bringing to video editing many of the capabilities long available in textual editors such as Microsoft Word.

We are also trying to alleviate some of the special problems of video editing. In particular, the Silver video editor provides multiple views, it uses the familiar interaction techniques from text editing, and it provides intelligent techniques to make selection and editing easier. The Silver editor is designed to support all phases of the video post-production process. Storyboards and the script view support brainstorming and planning for the video. The project, subject and outline views support the collection and organization of the source material. The timeline and script views support the detailed editing, and the preview view

Redesigning Traditional Media and Assessing Entertainment Value with Online Comics
As traditional media make the transition to the web, the need for a systematic way of assessing the entertainment value of interfaces becomes increasingly important. I will describe an experiment using online manipulations of traditional paper comic books to a) evaluate the effectiveness of different online presentations of a traditional entertainment medium and b) contrast systematic evaluation methods for assessing entertainment value. Paper comic books were transferred online and manipulated in two ways: the degree of user control in advancing through the story (“user control”) and the amount of the original page presented on the screen at a one time (“visual scope”). We used a combination of methods to measure entertainment value: pre and post questionnaires, active experience surveys, facial expression analysis, heart rate measurement and time
spent on the interface. From this study, it was determined that the most successful way of presenting comic books online is by giving the user full control over the navigation (“manual” condition), and by presenting each comic book page panel by panel (“panel in page” condition). The most effective and practical way for assessing entertainment value, according to the results of this study, is the use of post questionnaires, and either active experience surveys or facial expression analysis.

**AMIVA – A visual environment to teach programming**

It is hard to learn the skills to solve problems with algorithms. Traditionally this has been taught in paper, with flowcharts, or on a computer, with programming languages. Success with computer-assisted instruction for programming has been limited, even in the case of Intelligent Tutors. Usually these systems focus in the grammar of a specific programming language instead of concentrating in the problem solving process. Also, the usability of both the interface and the programming language are seldom considered. AMIVA integrates paper flowcharts and programming languages to overcome some of the biggest usability hurdles to learn structured programming. AMIVA was tested successfully in an Introduction to Programming class.

**HCI graduate program at CMU**

I’m a student in Carnegie Mellon’s Master of Human-Computer Interaction program. This interdisciplinary program has been very successful and might provide some insights on how to teach human-computer interaction at universities in Latin America.