

Human Computer Interaction (HCI) Track (DRAFT)

Track Description:

As the field of computer science has evolved, other subareas of CS have become part of the main CS curricula. Human-computer interaction is one such example. HCI studies all phenomena surrounding the design, evaluation, implementation and use of interactive systems. It is accepted today that computing products need to be easy to use; HCI is the subarea of CS that studies how to accomplish this. Virginia Tech has a world class HCI research program. The Center of Human-Computer Interaction is among the largest on campus and the graduate program in CS offers many HCI courses.

Why take this track?

This track prepares students for graduate work in HCI and for entry-level positions in software development for interactive products. Many undergraduate students who take HCI courses go on to pursue graduate degrees. We have had many students that pursue Masters and PhD in HCI at Georgia Tech, Carnegie Mellon, University of Michigan, and Virginia Tech, among other universities. Those working in industry often work in user interface design, usability evaluation, and other types of interactive programming (e.g., web development). Many of the companies in the CSRC value HCI skills and are among the largest supporters and innovators in HCI: IBM, Microsoft, Google, Apple, among others (see complete list at <http://www.cs.vt.edu/csdc/members.html>).

Associated Faculty:

Dr. Doug Bowman
Dr. Yong Cao
Dr. Denis Gracanin
Mr. Steve Harrison
Dr. Scott McCrickard

Dr. Chris North
Dr. Manuel A. Pérez-Quiñones
Dr. Francis Quek
Dr. Deborah Tatar

Junior Year

CS 3114	Data Structures and Algorithms	(3)___	CS 3724	Intro to Human Computer Interaction	(3)___
CS 2506	Intro to Computer Organization II	(3)___	CS 3214	Computer Systems	(3)___
CS 3744	Intro GUI Programming and Graphics	(3)___	CS 3604	Professionalism in Computing	(3)___
Comm 2004	Public Speaking	(3)___	Stat 4705	Statistics for Engineers or	(3)___
Math 3134	Applied Combinatorics	(3)___	Stat 4714	Probability & Statistics for EE	(3)___
<hr/>			Free Elective		
Total		15	Total		15

Senior Year

CS 41X4	Theory Course	(3)___	CS 4944	Senior Seminar	(1)___
CS 4XXX	Track-specific elective (see below)*	(3)___	CS 4784	HCI Capstone	(3)___
CS 3304	Comparative Languages	(3)___	CS 4XXX	CS Elective	(3)___
Engl 3764	Technical Writing	(3)___	CLE Elective		(3)___
CLE Elective		(3)___	ISE 3614	Human Factors Engineering	(3)___
Total		15	Total		13

*The track-specific elective in Fall of the Senior year must be one of the following:

- CS 4204 Computer Graphics
- CS 4624 Multimedia/Hypertext
- CS 4634 Design of information
- CS 4XXX Gaming course (if 4204 is not a prerequisite)