



Advancing Research at Virginia Tech
College of Engineering

Department of Computer Science
www.cs.vt.edu

Digital Education

Core and Affiliated Faculty:

Stephen Edwards, (540) 231-5723, edwards@vt.edu, Software engineering; reuse; component-based development; automated testing; formal methods; programming languages; information retrieval

Edward A. Fox, (540) 231-5113, fox@vt.edu, Digital libraries; information retrieval; multimedia information and systems

Bill Frakes, (703) 538-8497, frakes@cs.vt.edu, Software reusability; software engineering; experimental methods; information storage and retrieval

Steven Harrison, (540) 231-7783, sharrison@vt.edu, connecting art, science, design and engineering; creative computing; and investigating new forms of design education through design review and design methods

Scott McCrickard, (540) 231-6698, mccricks@cs.vt.edu, Notification systems; reuse and knowledge management in HCI; peripheral displays; ubiquitous computing

Manuel A. Pérez-Quñones, (540) 231-2646, perez@cs.vt.edu, Multiplatform user interfaces; user interface software; educational uses of computers

Cliff Shaffer, (540) 231-4354, shaffer@cs.vt.edu, Problem-solving environments; bioinformatics; digital education; visualization; data structures and algorithms; user interface design

Deborah Tatar, (540) 231-8457, tatar@vt.edu, Real-world technology projects that promote equity and excellence in math, science, and engineering education; human-computer interaction; CSCW

Selected Research Programs:

CITIDEL - Computing and Information Technology Interactive Digital Educational Library. <http://citidel.villanova.edu/>, <http://www.citidel.org>

Connecting Computing Educators Across Traditional Boundaries – Rethinking CS education through the arts, design, & sciences and approaches that speak to under-represented groups in CS.

CyberArts – Collaborate for creative technologies in arts and design. <http://www.cctad.vt.edu/main/>

Data Structure and Algorithm Visualization Wiki (AlgoViz Wiki) – A community resource for developers and users of algorithm visualizations. <http://algoviz.cs.vt.edu/>

Digital Library Curricular Resources - Developing syllabi and educational modules related to digital libraries.

<http://curric.dlib.vt.edu/>

Electronic Theses and Dissertations - With over 360K free online downloadable works from around the world covering all areas, but we especially hope to have works on computing. Also, research on multilingual access. <http://www.ndltd.org/>

LIKES Project - Living In the KnowlEdge Society Community Building Project. <http://www.likes.org.vt.edu/>

minimUML – A UML tool for CS education.

<http://minimUML.cs.vt.edu>

Parallel, distributed technologies for teaching - new genres of classroom connectivity.

Personal National Science Digital Library – Including a searchable repository of CS syllabi. <http://syllabus.cs.vt.edu/>

Research Methods Consortium – Compilation of materials useful for courses in Research Methods. <http://rnc.ncr.vt.edu>

Scaling Up SimCalc – Controlled experimentation and case-studies with technology to teach the mathematics of change and variation.

Superimposed Information – Tablet PC and NSDL support for annotation/knowledge management. <http://si.dlib.vt.edu/>

Supporting Knowledge Management and Reuse with LINK-UP – a web-based development environment for interface design, targeted for use in classrooms for educating students about HCI.

Web-CAT - the Web-based Center for Automated Testing

<http://web-cat.org>

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