

## Professional Profile

Arthur R. Murphy, the primary consultant of [Aeolian Solutions](#), works as an Information Architect who specializes in universal design. He uses his extensive background in information technology to design and evaluate websites, multimedia, and applications for cohesive user experiences.

Mr. Murphy's computer experience includes ten years of software design, two years of multimedia creation, and a decade of experience in Internet development. Mr. Murphy's current work in information architecture is informed by his expertise in issues of accessibility. His consulting clients include The Alternative Media Access Center ([AMAC](#)), an initiative of the University System of Georgia, and [G3ict](#), the Global Initiative for Inclusive Information and Communication Technologies, a flagship advocacy initiative of the United Nations Global Alliance for ICT and Development.

## Employment History

### 2005 – 2008 Emory University, Georgia

Web Services Leader, Information Architect

- Design of Emory University Library websites, guidance on instructional multimedia
- Consultation on accessibility

Primary focus is the design of web resources to support all functions of a research library: finding tools and instructional guidance to locate resources that enable scholarly research and the creation of new knowledge. Chair usability subgroup of the Council on Technology Initiatives.

### December 1999 – 2005 IBM, Georgia

Information Architect

- Design of websites, multimedia
- Consultation on accessibility

### Assignments

- **Consultant.** Contributed to the on-going achievement of the Section 508 Standards for the US Postal Service. The clear Section 508 mandate for accessible websites in June of 2001 has been accomplished by most government agencies. However, the institutionalization of accessibility into the entire technology infrastructure requires long-term strategic policy development to construct evolutionary guidance. Mr. Murphy assisted with policy development and dissemination needed to achieve full compliance with the law. [Security Clearance given for internal data access.]
- **Information Architect.** Collaborated in the design of a sub-site of the Census Bureau. The goal was simplified navigation and presentation of a subset of complex demographic data originally designed for expert users.
- Designed a component of the interface for a web-based application used by health insurance customers to access medial information. The primary component addressed was the Message Center: secure email to facilitate communication between health insurance Members (end users) and health insurance Customer Service Representatives.
- Designed the interaction structure for educational multimedia experiments for TryScience.org, a website for math and science education for middle school students. (TryScience.org is a partnership between IBM Corporation, the New York Hall of Science, the Association of Science-Technology Centers, and science centers worldwide.)
- Assisted in the design of a web-based system for the sale of satellite images and aerial photography for a major photography corporation. The interface design enabled users to select custom images composed of selections from multiple databases.

**1991 – 1999 Georgia Institute of Technology, Georgia**

Research Scientist / Instructor

- Design of websites for dissemination of accessibility resources
- Design and development of instructional multimedia
- Instruction: computer programming for people with disabilities
- Access Board committee member – 1998-1999 – draft Section 508 legislation

**1980 – 1991 Goodwill Industries (on Georgia Tech campus), Georgia**

Instructor / Program co-director

- Instruction: computer programming for people with disabilities

**Assignments**

- **Multimedia Designer.** Co-designed a set of 10 instructional videos and 3 interactive CDs to support the delivery of adult education by a state government education agency. This collection of educational material, supplemented with student workbooks and instructor guidance, has been successfully used to increase the literacy of adult learners. Initial evaluations of user interaction demonstrated the effectiveness of an uncluttered interface supported by user-selectable speech output. An early prototype of this learning environment was exhibited as "Design of An Adult Literacy Interactive Learning System" at an installation in the Unlimited By Design exhibition, Cooper-Hewitt Museum in New York, November 17, 1998 — March 21, 1999.
- **Information Architect.** Developed a website to disseminate information for the inclusion of students with disabilities into math and science education. The site catalogued both conceptual guidance and assistive devices that can be used to make education accessible to students with diverse impairments. At its launch, the site was awarded a "Dozen Best" award by The Eisenhower National Clearinghouse.
- **Instructor.** Taught the essential principles of computer programming to adults with physical disabilities: fundamental data structures, systems analysis methodologies, and professional business skills. Mr. Murphy worked with a curriculum committee to plan course content and to evaluate student performance. He obtained college accreditation for this course through the American Council of Education. Eighty percent of all graduates were employed as information technology professionals.

**1970 – 1980 Insurance Systems of America, Georgia**

Product Consultant.

- Supported On-Line Alpha data retrieval system. Supported customer base in North America, created product enhancements, provided custom installations, and education classes.

**1974 – 1979 Trust Company of Georgia**

Systems Analyst.

- Designed and implemented component of on-line banking system. Managed team for maintenance of bank's Factoring System. Installed IBM system software: CICS.

**1973 – 1974 Crawford W. Long Hospital, Georgia**

Systems Analyst.

- Designed and implemented major component of unique hospital accounting system. Designed custom database for performance requirements.

**1968 – 1972 Advanced Computer Techniques, Corp, New York**

Systems Analyst / Technical Writer.

- Technical writer on corporate accounting system for Union Carbide. Programmer analyst for proprietary medical accounting system developed in Phoenix office.

## Education and Background

- Master of Science in Information Design and Technology [1997], Georgia Institute of Technology
- Bachelor of Arts in English Literature [1967], Middlebury College
- Class in IBM Systems Integration (SI) Methodology
- Programming: COBOL, C, Pascal
- Information Presentation: MS Office, Visio, Photoshop
- Multimedia: Authorware

## Publications and Consultations

- “Section 508: Beyond Compliance - Universal Design for Usability and inclusion” – National Association of Government Communicators – May 2010
- “Focus Groups: The Good, the Bad, and the Unanticipated” – Emory Brown Bag Series – June 2007
- “Pervasive Accessibility, *redux*” – Presentation to CDC – November 2006
- Co-teach CS 8803-HCI Professional Practicum in the HCI Masters program in the College of Computing at Georgia Institute of Technology: spring semester 2006, fall semester 2006, fall 2007.
- Reviewer for a Special Issue of ACM Transactions on Computer-Human Interaction (TOCHI): *Web Accessibility*. Reviews during January 2006.
- Served as judge for the CHI\*A Student Poster Contest and Scholarship in Honor of World Usability Day – sponsored by the Atlanta Metro Area chapter of the ACM Special Interest Group on Computer-Human Interaction (SIGCHI) – November 3, 2005.
- “[Legal Requirements and Implications of Section 508 - The Policy of Accessibility](#)” – Panel presentation: The 3rd annual Public Health Information Network (PHIN) Conference in Atlanta – May 2005
- “The Other Convergence: Awareness, Advocacy, Law, Technology, & Common Sense” – Panel [co-moderator with William Curtis]: The Sixth International ACM SIGACCESS Conference on Computers and Accessibility – conference in Atlanta – October 2004
- “Pervasive Accessibility” – Presentation to CDC – September 2004
- Served as peer review panelist for the National Science Foundation’s SBIR grant program to fund innovative technology to assist people with disabilities – August 2001, September 2002, August 2003, and August 2004.
- “Designing for Non-Traditional Modalities” [with Brinda Cockburn, E-Z Gov] – Presentation to CHI Atlanta – February 2003
- “Pixels for Kids - Multimedia and Websites - Another Design Perspective” [with Monica Ellingson and Kimberly Sass] – Presentation to CHI Atlanta – July 2002
- Served as Georgia Institute of Technology’s representative to the Committee of the Federal Government responsible for drafting standards to implement access to information by people with disabilities. [The 1998 Amendments to Section 508 directed the Architectural and Transportation Barriers Compliance Board (Access Board) to develop and publish standards.] – fall 1998 - spring 1999.  
<<http://www.access-board.gov/508.htm>>
- “Literacy by and for the computer” [with William Curtis] Innovation – the quarterly journal of the industrial designers society of America – spring 1999.
- “Web Usability and Technology” Computer-Mediated Communication Magazine (ISSN 1076-027X), < <http://www.december.com/cmc/mag/1999/jan/murphy.html> > January 1999.
- “Approaches to Integrating Pedagogy and Multimedia: An Expanded Definition of API,” a paper - Association for the Advancement of Computing in Education - conference in Freiburg, Germany, June 1998.
- Ira, Vanessa B.; “Barrier Free Education” in magazine: Exceptional Parent, February, 1988, Vol. 28, Issue 2, (article about Web site / Master’s Project – Barrier free Education – based on telephone interview / e-mail / Web site review with Arthur Murphy.)
- Interface Design: Implications for Students with Disabilities,” a paper - Association for the Advancement of Computing in Education - conference in Calgary, Canada, June 1997.