Professional Profile

Arthur R. Murphy, the primary consultant of <u>æolian solutions</u>, is 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 design and development. Mr. Murphy's current work in information architecture is informed by his expertise in issues of accessibility.

He was a member of the committee that drafted the US Section 508 accessibility standards (1998-1999).

Employment History

2008 - Present Aeolian Solutions

Information Architect

Primary Consultations:

The Alternative Media Access Center (<u>AMAC</u>), an initiative of the University System of Georgia [AMAC is now located at the Georgia Institute of Technology]
Activities:

- Evaluation of instructional software for use by students with disabilities;
- Design & development of a resource data base for the Georgia ADA office;
- Design and presentation: one week of a MOOC course on ICT accessibility

<u>G3ict</u>, the Global Initiative for Inclusive Information and Communication Technologies, a flagship advocacy initiative of the United Nations Global Alliance for ICT and Development. Activities:

- Exploration of Atlanta as host city to model best practices in accessibility for global dissemination:
- Presentation in support of Seventh session of the Conference of States Parties to the Convention on the Rights of Persons with Disabilities, 10-12 June 2014

Taught at Georgia Institute of Technology:

- Professional Practicum (2006 2008) in the HCI Masters program in the College of Computing;
- Guest lectures on accessibility (2010 & 2011) to industrial design classes in the College of Architecture.

2010 – 2011 Centers for Disease Control and Prevention, Georgia (sub-contractor: Northrop-Grumman) User Experience Designer, Information Architect

Broad focus was the evaluation and design of web resources to disseminate health information effectively.

- Evaluation of existing sites in terms of user behavior & interaction flow
- Design of new CDC sub sites
- Consultation on accessibility
- Assistance in workflow reconfiguration
- Consultation on CMS metadata standards
- Involvement with ongoing enhancements to CDC mobile site
- Enhancement of audience segmentation definitions for Scenarios of Use

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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 was 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 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, and the Association of Science-Technology Centers, and science
 centers.)

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 Standards

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. 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.

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- 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

- 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, Omnigraffle
- Multimedia: Authorware

Publications and Consultations

- Panel: "Design for inclusion is good design on any terms!" amUX :: User Experience Conference in Atlanta January 2018
- "Information and Communication Technology (ICT) Accessibility" MOOC: offered by Georgia Institute of Technology on edX Platform: 2016 https://courses.edx.org/courses/course-v1:GTx+ICT100x+1T2016/info
- "Mobile accessibility: The Sky is the Limit! 2014 trends and innovations that are transforming
 accessibility forever" Presentation at the United Nations in support of the seventh session of the
 Conference of States Parties to the Convention on the Rights of Persons with Disabilities, June 2014
- "Tell Me Something I Don't Know!" Keynote address Online Lifeline Conference Valdosta State University – February 2014
- "Accessible Social Media Design" National HIV Prevention Conference August 2011
- "Section 508: Beyond Compliance Universal Design for Usability and inclusion" National Association of Government Communicators – May 2010
- "Pervasive Accessibility, redux" Presentation to CDC November 2006
- Co-taught 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, fall 2008.
- 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 ComputerHuman 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
- 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.
- "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.
- "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" <u>Computer-Mediated Communication</u> Magazine (ISSN 1076-027X), 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.
- Interface Design: Implications for Students with Disabilities," a paper Association for the Advancement of Computing in Education - conference in Calgary, Canada, June 1997.