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Summary

Ten years experience in the design, development, testing, and project management of web sites and complex web-applications, encompassing the spectrum from user interface design to back-end programming.

Education

Ph.D. Physics 1990. Brandeis University, Waltham, MA
Thesis: Disorder in Protein Crystals

B. A. Math, B. A. Physics 1985. Illinois Wesleyan University, Bloomington, IL
Magna Cum Laude

Professional Experience

Team Lead, User Interface Group
Web Technologies Department
Information Technology
University of Houston (2003-present)

Internet Developer III
Department of Information Services
Information Technology
University of Houston (2000-present)

Artist in Residence
DiverseWorks theater (2000)

Board Member
Art Institute of Houston (1998-2001)

Web Programmer
Department of Biochemistry and Cell Biology
Rice University (1998-1999)

Web Developer
Travelogix, Inc. (1997-1998)

Lecturer and Webmaster
Institute of Biosciences and Bioengineering
and Keck Center for Computational Biology
Rice University (1994-1997)

Postdoctoral Fellow,
W. M. Keck Center for Computational Biology
Rice University (1991-1994)

Other Training and Certification

Project Management Certificate Program (35 units recognized by PMI)

PeopleSoft (PeopleTools, Portal Administration)

Quality (TQM, CQI)

Web Projects

UH Student Portal
(in development)
Responsible for implementing user-interface branding and themes for the University of Houston Student Portal, using PeopleSoft PeopleTools and Application Designer. Assist in portal administration. Conduct focus groups for the site's user interface.

UH Information Technology website
(www.uh.edu/infotech)
On re-design team for University of Houston IT site, converting static html site to database-driven Apache/MySQL/PHP site, including dynamic Flash applications. Designed and conducted usability study of the site. Acted as Team Lead responsible for resource allocation during the project. Project lead for the site's content-management system, which includes custom web-enabled interface for Subject Matter Experts to publish and maintain their own content.

AskShasta
(www.uh.edu/askshasta)
Designed and conducted two usability studies for UH Customer Relation Management (CRM) system. Tested the web-based system for accessibility, including ADA and browser/platform compliance.

UH Enrollment Services Online
(www.stu.uh.edu/uoh)
Interface design and usability study for University of Houston's main online registration and enrollment system.

UH website
(www.uh.edu)
On team responsible for complete re-design of the University of Houston's main website. Collaborated with external design firm, programmers and content experts to convert design requirements into actual web pages, dynamically generated using apache shtml, dhtml, Perl and Flash.

Keck Center for Computational Biology
(www.keckcenter.org)
Graphic design and ColdFusion code for multi-institutional computational biology website. Responsible for coordinating project requirements defined by stakeholders from three different institutions, Rice University, Baylor College of Medicine, and University of Houston.

Biology Workbench
(workbench.sdsc.edu)
On development team of web-based genetic and structural research tool for biology and medicine. Used Perl, HTML and OpenGL to create webpages from multiple dynamic datasources, including a web version of XRayView, a browser-based crystallography teaching tool.

Yahoo! Travel
(travel.yahoo.com)
On development team for major online travel site. Responsible for information design component of the e-commerce environment, as well as the front-end implementation using custom in-house middleware code. Designed web banner-ads for the service.

Grant Support

Houston Cow Parade, 2001

Artist in Residence, DiverseWorks, 2000

CACHH public arts grant, 1999

National Science Foundation, 1994-97

Invited Lectures / Presentations

- 'Biofeedback as a User Interface', University of Houston, 2004
- 'Web Accessibility', IT Training, University of Houston, 2003

- 'The Golden Ratio in Art, Science, Design and Technology', University of Houston, 2003
- 'Tufte's Theory of Information Design', School of Communications, University of Houston, 2002
- 'Making the Internet Accessible to the Disabled', University of Houston, 2002
- 'Udder Dada', multimedia kiosk for the Houston Cow Parade, 2001
- 'Computers and Modern Art', Philosophy Department, University of Houston, 2001
- 'Jonah and the WWWhale', multimedia theater production, DiverseWorks theater, Houston, 2000
- 'Planet-X', Multimedia Exploration of Mathematics and Music, performed in collaboration with OrchestraX symphony and choir, Houston Museum of Natural Science, 1998
- 'Lives of a Protein.' Symposium on Mathematics of Quasi-Equivalence, Florida State University, 1997
- 'www.Faust', multimedia theater production, Zocalo theater, Houston 1996
- 'Chaos, Sub-states and Sampling in Protein Dynamics.' Biophysical Society. Baltimore, MD, 1996
- 'Molecular Motion in Proteins and Nucleic Acids.' Symposium on X-ray and Neutron scattering, Brookhaven National Lab, 1996
- 'A Sampling Problem in Molecular Dynamics Simulations of Macromolecules.' Biophysical Society. San Francisco, CA, 1995
- 'Studies of Diffuse Scattering Reveal Liquid-like Disorder in Protein Crystals.' International Union of Crystallography. Beijing, China, 1993
- 'Analysis of Diffuse Scattering from Proteins and Nucleic Acids.' International Union of Crystallography. Beijing, China, 1993

Publications

- Clarage J. B., Phillips GN Jr.
  Analysis of diffuse scattering and relation to molecular motion.
  Methods Enzymol. 1998;277:407-32.
- Andrews BK, Romo T, Clarage JB, Pettitt BM, Phillips GN Jr.
  Characterizing global substates of myoglobin.
  Structure. 1998 May 15;6(5):587-94
- Wall ME, Clarage JB, Phillips GN.
  Motions of calmodulin characterized using both Bragg and diffuse X-ray scattering.
  Structure. 1997 Dec 15;5(12):1599-612.
- Clarage, J. B. 'Web Labyrinth', WIRED magazine, 4.08 (1996)
- Clarage, J. B. 'Is There New Art on the Internet?', Zocalo News, (1996)
- Romo. T. D., Clarage, J. B., Sorensen, D. C. and Phillips, G. N., Jr. Automatic Identification of Discrete Substates in Proteins: Singular Value Decomposition Analysis of Time-averaged Crystallographic Refinements. *Proteins*, 22:311-321, (1995)
- Clarage, J. B., Romo, T., Andrews, B. K., Pettitt, B. M. & Phillips G. N. Jr. A Sampling Problem in Molecular Dynamics Simulations of Macromolecules. *Proc. Natl. Acad. Sci.*, USA, 92:3288-3292, (1995)
- Clarage, J. B. 'Changing Experience', WIRED magazine, 3.12 (1995)
- Clarage, J. B. 'Surfing' University Blue vol. XII, (1995)
- Clarage, J. B. 'Portrait of the Artist as a Young Surfer' Trincoll Journal, April 27, (1995)
- Clarage, J. B., and Phillips, G. N., Jr. Cross-validation Tests of Time-averaged Molecular Dynamics Refinements for Determination of Protein Structures by X-ray Crystallography. *Acta Cryst.*, D50:24-36 (1994)

- Kolatkar, A., Clarage, J. B., Phillips, G. N., Jr. Analysis of Diffuse Scattering from Yeast Initiator tRNA Crystals. *Acta Cryst.* D50:210-218 (1994).
- Clarage, J. B. 'New Muse' SOC, vol. 3 (1994)
- Clarage, J. B. 'High Bawd Helena' Cyberkind (1994)
- Clarage, J. B. 'Mixing Blood with Fire' Texas Magazine (1994)
- Clarage, J. B. 'She Psyches Me up, this Mother Nature' Prophetic Witness (1993)
- Clarage, J. B., and Phillips, G. N., Jr. Protein Crystallography and Molecular Dynamics on the Connection Machine. *Biophys. J. abstracts*, 61:A448 (1992)
- Clarage,J.,Clarage,M.,Caspar,D. L. D. Correlation of Atomic Movements in Lysozyme Crystals, *Proteins*, 12:145-157 (1992)
- Caspar,D. L. D.,Clarage,J.,Salunke,D. M.,Clarage,M. Liquid-like Movements in Crystalline Insulin, *Nature*, 332:659-662 (1988)

Technical Skills

Design: Macromedia Studio MX 2004, Adobe Creative Suite, Director, PeopleSoft Application Designer

Environments: UNIX, Apache/MySQL/PHP, Macintosh OS-X, Windows

Languages: HTML, XHTML, CSS, PHP, Perl, Coldfusion, UNIX shell scripting, Mathematica, FORTRAN

Project Management: Microsoft Project, FastTrack

Philosophies: User-centered design, Usability Testing, Accessibility, Open Standards, Project Management

Bookshelf: Tufte's Envisioning Information, The Complete Drawings of Leonardo Da Vinci, Wolfram's A New Kind of Science, Nielsen's Designing Web Usability, WIRED magazine

References

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additional references available upon request