

# Robert Clayton Barnes

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## Contact Information:

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## Present Address:

22c Hollandale Lane  
Clifton Park, NY 12065

## Education

**Human-Computer Interaction M.S.**, Rensselaer Polytechnic Institute, Troy, NY  
*In progress: Cumulative 4.0 GPA*

*Dec. 2009*

**Computer Science B.S.**, University of Arizona, Tucson, AZ

*May 2008*

**Linguistics B.A.**, University of Arizona, Tucson, AZ

*May 2008*

## Academic Honors

- *National Merit Scholarship* 2003–2007
- *First Place Project in Computer Science and Intel Outstanding Use of Computers Award*, Mississippi State Science and Engineering Fair 2003
- *Top Score on Computer Science Test* as well as *First Place Programming Team Member*, Mississippi Science and Math Tournament 2003

## Professional Experience

**Teaching and Learning Assistant:** Rensselaer Polytechnic, Troy, NY

*2008–2009*

- Independently taught, planned, and developed all materials for four weekly language and culture lab sections.
- Developed and taught public workshops for non-native English speakers on topics ranging from mythology to typesetting a thesis in  $\LaTeX 2\epsilon$ .
- Evaluated student performance and provided individual support developing skills across a wide range of proficiencies.

**User Experience Contractor:** Intrigo, Tucson, AZ

*2006–2008*

- Revised existing and created new interfaces to improve user experience and maximize usability
- Designed and implemented software installation, upgrade, and maintenance system from version-controlled developer repositories onto customer servers

## Other Experience

**Author:** *New Interface Advocate* HCI Blog

*2007–Present*

- URL: <http://www.hci-matters.com/blog>
- Over 100,000 unique visitors this year
- Topics encompass both theoretical topics and application of HCI principles to real-world problems

**Open-Source HCI:** *Lumiera* Editor, *OpenBox* Window Manager, *C\*mus* Player

*2006–Present*

- Core interface designer for *Lumiera* non-linear video editor
- Ongoing usability refinement of *OpenBox*, *C\*mus*, and other mature projects

## Software

*Programming:* C, C++, Java, JavaScript, Prolog, PHP, Ruby, Shell Scripting, SML/NJ

*Markup/Query:* CSS, Regular Expressions, MySQL, XHTML

*Packages:* 3D Studio MAX, Adobe Creative Suite, Autodesk Maya, Eclipse, ESRI ArcView GIS, GNU development toolchain, GIMP, Graphviz, Inkscape,  $\LaTeX 2\epsilon$  (including .sty package design), Microsoft Office Suite, OpenOffice.org

*OS Experience:* Linux (including Debian, Gentoo, Fedora Core, and Slackware), Windows, MacOS

## Coursework

*Theory:* Programming Datastructures, Algorithm Design and Proofs

*Programming:* Object-Oriented Design, Comparative Programming Paradigms, Computer Architecture and Assembly Programming, Network Theory and Programming, System Programming and UNIX, Operating System Design and Development

*Human-Computer Interaction:* Foundations of HCI, Theory and Research in HCI, HCI Prototype Production, Studio Design in HCI, Information Architecture, Communication Design for the World Wide Web, Human-Media Interaction