

## HIGHLIGHTS

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- Ten years experience with object oriented development for desktop software in Java (Swing/JFC) and web-based applications in a variety of programming languages
- Conducted usability research involving Army personnel for training simulation software
- Managed usability testing of Ion Storm's video game, *Thief: Deadly Shadows*
- Experienced in reviewing RFPs and writing business proposals
- Comfortable working with diverse, geographically disparate teams

## TECHNICAL SKILLS

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- **Programming** – Java, Swing, JDBC, JSP, SQL, XML, JavaScript, jQuery, Python, Drupal, PHP, HTML, CSS, UML, IDEFØ, R
- **Usability** – user testing, heuristic evaluation, pluralistic walkthroughs, wire frames, use cases, accessibility, competitive analysis
- **Tools** – Eclipse, IntelliJ, Visual Studio, Photoshop, Lightroom, Fireworks, Visio, GIMP, Inkscape, Viso, Dia, OmniGraffle, svn, cvs, bzt, Trac, JIRA

## PROFESSIONAL EXPERIENCE

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### Software Engineer

Apr 2010—Present

*GE Aviation Systems*

- Maintain software to convert GIS data for airport obstacles from a DOF, NAIDS, UDDF, and OE/AAA into a common internal format for use in flight path design
- Export obstacle information to Google Earth using internal KML server

### Research Assistant

Sep 2009—Dec 2009

*Oregon State University*

- Designed mock-up of cockpit traffic display (CDTI) to integrate ADS-B and TIS-B traffic and coverage boundaries on a single display
- Developed web application to catalog human factors issues associated with the NextGen flight deck
- Analyzed ASRS incident reports to identify human factors issues
- Managed undergraduate team on flight simulator re-build

### Applications Developer

2005—Apr 2010

*Four Kitchens, Motive, Austin Logistics, University of Texas*

- Produced wireframes and workflows for web-based applications
- Develop and contribute open source themes and modules for the Drupal content management system
- Developed automated functional web application tests using Jython
- Involved in software specification, design, project planning, and technology decisions
- Developed Java Swing-based application for call center management
- Developed web-based network hardware management software using Java, Struts, and Velocity

**Research Assistant / Usability Specialist****2004—2005***University of Texas, IBM*

- Conducted user testing (pluralistic walkthroughs) and heuristic evaluation of simulation software designed to train Army battle commanders. Work involved testing and interviewing Army personnel with one test conducted at Ft. Sam Houston
- Managed and conducted pre-release usability testing for *Thief: Deadly Shadows*. Developed user test plan, conducted tests, and presented results to the executive producer. Tests involved direct observations, verbal protocols, video recording, and post-play interviews and questionnaires
- Performed competitive analysis between WebSphere and .Net application servers
- Developed Python tool for categorizing usability problem reports based on textual content

**GUI Developer****2000—2003***CALEB Technologies, ThinkSpark*

- Developed user interface (Swing/JFC) for real-time crew scenario software for Northwest Airlines. Application provides crew coordinators with a real-time view of current flight patterns and downstream problems, allowing modifications and what-if scenarios
- Created custom user interface components using Swing and Java2D for internationalized desktop application used to control network timepiece hardware
- Worked directly with customers and QA engineers to ready software for user acceptance testing.
- Assisted technical writing staff with document verification

**Applications Developer****1998—2000***ThinkSpark, Journyx, Raytheon*

- Developed client (Swing) and server-side components for Java desktop application for centralized contact and bookmark management via a web service
- Implemented web-based commerce solution for Home Interiors, Inc
- Created automated data replication application for Army project

**E**DUPLICATION

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**Oregon State University**

Corvallis, OR

Graduate coursework in statistics and human factors with an emphasis on aviation.

**University of Texas**

Austin, TX

M.S., Information Studies, May 2006

Emphasis: Usability and Information Architecture

**University of Southern Mississippi**

Hattiesburg, MS

B.S., Software Engineering Technology, May 1998

**P**UBLICATIONS

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Bias, R., Lucas, S., & Latham, T. (2007). The HURIE Method: A Case Study Combining Requirements Gathering and User Interface Evaluation. In C. Righi, & J. James (Eds.). *User-Centered Design Stories* (pp. 163-183.). Boston: Morgan Kaufmann.

Lucas, S., & Fulton, D. (2004). What We Learned Evaluating the Usability of a Game. *Usability Interface*, 11, 7-8.

**P**ROFESSIONAL AFFILIATIONS

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IEEE, ACM, UPA, HPEE