



## Development

### **Developer/Architect, Reed & Witting Company, 2002-Present**

- Designed and developed AJAX-based Web To Print system, using HTML, PHP, MySQL, Javascript, CSS and the DOM
- Abstracted CSS and PHP information from existing web site to streamline future changes, and provide a unified look and feel to both our public site and privately hosted web applications
- Wrote bridging software between existing systems and third party solutions
- Transitioned legacy database systems (Access 97, 2000) to MySQL backends
- Built inventory tracking and fulfillment system using MySQL, PHP and Perl
- Worked with customers and management to create web interface for customer inventory management and ordering
- Created a solution to merge data from legacy and new accounting systems to provide a single source for invoice and job lookups
- Kept up to date with beneficial technologies and rolled them into current custom systems
- Scripting as needed for maintenance and convenience

**Languages:** PHP, Visual Basic for Applications, Perl, HTML, CSS, Javascript, SQL

**Samples:** Proprietary, but available for personal demonstration and code review upon request

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### **Core Developer, Blender Foundation, 2006-Present**

- Commit rights to the main trunk of Blender, the world's most popular animation software
- Member of the 2.5 Task Force, whose primary goal is the creation of an internal operator-based model for all user interaction
- Extending and fixing the Python API
- Extending and fixing top level animation tools
- Core character animation tool development, focusing on animation baking and conversion
- Animation constraint development and maintenance
- Bug fixing and bug tracker triage
- Write extended feature proposals and create mock-ups and prototypes for future development

**Languages:** c, Python

**Samples:** Available at <http://www.blender.org>; Commit history on <http://ohloh.net> under "harkyman"

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### **Principal Developer, BlenderPeople, 2004-2007**

- Combine custom Blender code, Python and MySQL to generate fully animated crowd simulations
- Features include actor classes, variable orders, weight-painted terrain following, level of detail, variable path finding (A\*, custom look-ahead) and excellent documentation
- Currently in revision for 0.9 release

**Languages:** c, Python, SQL

**Samples:** Available at <http://www.harkyman.com/blender-people/>

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## **Education**

University of Pennsylvania, Bachelor of Arts, English, 1993





## Writing and Editing

### Technical Editor, APress, 2008-2009

*Foundation Blender Compositing (2009)*

- Evaluated all content for technical accuracy
  - Provided extensive organizational notes and author mentoring, beyond contract qualifications
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### Author, Focal Press (An Imprint of Elsevier, Inc.), 2008

*Animating with Blender: How to Create Short Animations from Start to Finish (2008)*

The book details the short animation production pipeline, from story and theme development to animation and the technical aspects of building and running a render farm, through final editing, focusing on implementing each step within Blender's tool set.

- Contracted with Focal Press to provide a manuscript of 84,000 words including technical illustrations.
  - Met or exceeded all production deadlines, including an drastically accelerated schedule near the end of production to accommodate changes in corporate policy.
  - The book comes with a finished four-minute short animation project, self-produced. All production files are released under a Creative Commons license for educational purposes.
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### Editor and Lead Author, Blender Foundation/No Starch Press, 2007

*The Essential Blender (2007)*

I was approached by the Foundation to come up with concepts for a publication that would generate sales and raise funds. I proposed the book that became The Essential Blender, the Foundation's official "getting started" guide to their great piece of software. All of the key components that made the book such a success, including the structure of the book, the community involvement and the market analysis were a part of the original proposal.

- Personally wrote over 65% of the manuscript, representing about seventy thousand words
  - Recruited and managed 9 authors and 12 technical editors for the balance of the book's content
  - Recruited, hired and managed a copy editor
  - Created numerous illustrations for use throughout the book
  - Served as the style editor and second round technical editor for the whole book
  - The book is currently in its third printing since its introduction in June 2007.
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### Technical Editor, Wiley/Sybex, 2007-2008

*Introducing Character Animation with Blender (2007); Bounce, Tumble and Splash (2008)*

- Tested all examples described in manuscripts
- Suggested alternative methods to or unmentioned pitfalls in existing content
- Tested included example files and DVD content
- Troubleshoot problem or failing examples, then researched and devised solutions
- Provided technical and organizational guidance for complex topics

### Education

University of Pennsylvania, Bachelor of Arts, English, 1993





## IT Management and Administration

### IT Manager, Reed & Witting Company, 1998-Present

- Research, build and maintain local mail servers, including gateway-level virus and SPAM filtering
  - Responsible for researching, contracting and evaluating email and web service providers
  - Create and enforce security policy for internal and external communications
  - Advise ownership about IT legal issues that could require counsel
  - Maintain security on Windows/Mac/Linux LAN, including wireless
  - Leverage older hardware with Linux installations for increased server capacity
  - Troubleshoot and maintain Windows, Macintosh and Linux systems
  - Evaluate desktop and server needs, enacting replacement and upgrade plans
  - Provide day-to-day support and immediate response for IT emergencies
  - Choose, install, configure and maintain email, FTP and web servers
  - Design and implement backup routines including recovery testing
  - Manage and maintain systems availability through planned disruptions such as our recent company relocation, and major proprietary system upgrades
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### Education

University of Pennsylvania, Bachelor of Arts, English, 1993

