

Katherine Anne Hirsch

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HIGHLIGHTS: As both a skilled programmer and artist I communicate well between programmers and artists. Additionally I have strong troubleshooting and problem solving skills.

EDUCATION: University of Maryland, Baltimore County (UMBC)
B.A. in Imaging and Digital Arts: Animation Track, *Magna Cum Laude*
B.S. in Computer Science, *Magna Cum Laude*
December 2004 GPA: 3.81/4.00

SKILLS:

- 3-D Modeling, Animating and Lighting
- Animation / Painting / Drawing
- Digital Video Editing
- Computer and Graphics Programming

SOFTWARE SKILLS:

- C and C++ Programming
- Alias Maya / 3D Studio Max
- Adobe Photoshop / ImageReady
- Alienbrain / Adobe Premiere
- Microsoft Office / Visual Studio
- Macromedia Director / Flash / Dreamweaver

PROFESSIONAL EXPERIENCE: Staff Programmer August 2005-Present
Breakaway Games, Ltd., Cockeysville, Maryland

- Develop features and fix bugs for in-house development tool
- Assist in the mock-up, code and design of project's user interface
- Maintain and updated bug/feature request for in-house tool

Staff Artist January 2005-October 2005
Breakaway Games, Ltd., Cockeysville, Maryland

- Manage Excel databases of game asset
- Model assets for the game using 3d Studio Max
- Create textures for models and add assets to the game

Level Designer June 2003-July 2004
Vision Videogames, Towson, Maryland

- Designed and developed functionality for the game menus in the development environment
- Built, optimized and debugged the game assets in Maya and the development environment
- Programmed art tools for texture dictionaries in Mel and Visual Basic and train co-workers
- Generated and augmented animations and geometry using Maya
- Created all the icons in the game

Research Assistant May 2002-September 2003
UMBC Computer Science Department, Baltimore, Maryland

- Explored ideas of atmospheric perspective in data visualization using C++
- Developed image based rendering system that applied animation concepts using C and C++
- Designed and updated VANGOGH Lab website (<http://www.csee.umbc.edu/gavl/>)

Intern June 2002-August 2002
E-Global Interactive, Baltimore, Maryland

- Constructed interactive Flash MX tutorials using Flash MX
- Developed web graphics and interactive media

INTERACTIVE PROJECTS: *Kelvin 724* March 2004-May 2004

- Built upon the Wild Magic game engine in C++ with a team to create a fire fighting game
- Created all artwork for randomly generated forest using Maya and Photoshop
- Developed C++ code to support importing and manipulating game art

Master Lab Scheduler

September 2003-December 2003

- Worked with a team to acquire specifications and design as lab scheduling system
- Implemented text based user interface and other functionality in C++, edited all system parts
- Presented product to client in a professional setting

Image Based Rendering Applied to Animation

February 2003-May 2003

- Developed an image based renderer that creates a volume from source images to reconstruct an animation that can be rotated interactively using C, C++, and OpenGL
- Wrote a technical paper based on the project and research of prior work
- Gave professional presentation of final result to Advanced Computer Graphics class

Ten Bulls

September 2002-December 2002

- Participated in collaborative interactive project where a forest is randomly generated and the user navigates through the forest to locate and herd the bull
- Developed algorithm in Virtools for random topography generation, modeled bridges, and aided in development and realization of concept
- Exhibited project as immersive virtual reality installation open to the UMBC community

In Search of Mother Earth

April 2002-May 2002

- Participated in group project on the four elements where each group member contributed a Macromedia Director piece on air, earth, fire, or water
- Created a short interactive computer game for the Earth part of the project where the user must solve puzzles to find Mother Earth.

HONORS:

- Filmmaker in the 2006 Maryland Film Festival for animated short “Dragin’ On”
- Computing Research Association (CRA) Outstanding Undergraduate Award Honorable Mention, 2004
- Imaging Research Center (IRC) Fellows Scholarship, 2002-2004