

Dennis O'Brien

[dennis@dennisobrien.net](mailto:dennis@dennisobrien.net)

## Work Experience

### Leapfrog Enterprises

Project Engineer

Emeryville, CA

7/2003 to present

- Designed and developed solutions and tools to increase efficiency and smooth the production process.  
Primary technologies: Python, C++
- Created educational games for the Leapster Game Platform.  
Primary technologies: Flash, C++, Python
- Created a framework for scripting Flash MX 2004 with Python.  
Primary technologies: C++, Python
- Created an extensible 2D level editor for platform games.  
Primary technologies: Python, wxPython, Flash (AS2)
- Supported groups of internal and external programmers on the Leapster Game Platform.

### Purple Monkey Studios

Lead Programmer

Chicago, IL

3/2002 to 7/2003

- Architected and implemented large-scale, data-driven web applications.  
Primary technologies: Flash MX ActionScript, UML, XML
- Developed rapid prototypes of applications and games.  
Primary technologies: Flash MX, Flash Components, Python, C++
- Identified production bottlenecks, then designed and developed tools to streamline production.  
Primary technologies: Python, C++, XML
- Defined functional specifications for client proposals and technical specifications for team development.
- Collaborated with artists and clients to make compelling and entertaining web experiences.

Freelance Developer

Chicago, IL

8/2001 to 3/2002

- Worked closely with game designers at VTechKids to develop game prototypes for custom handheld devices.  
Primary technologies: Macromedia Flash 5
- Created custom solutions for secure online transactions.  
Primary technologies: PHP, Python, PGP/GPG

Jellyvision Interactive  
Lead Programmer  
Chicago, Illinois  
3/2000 to 8/2001

- Developed multi-player and single-player games and online experiences.  
Primary technologies: Macromedia Flash, Java, XML, and JavaScript.
- Designed and developed back-end systems to support multi-player games and persistent user experiences.  
Primary technologies: Java, XML, JavaScript, and Perl.
- Designed and developed off-line tools to streamline production.  
Primary technologies: C++, Flash SDK, Python, and Perl.
- Worked closely with artists and designers to expand possibilities and reduce work.  
Primary technology: Face-to-face communication.

Instructional Technology  
Lab

Consultant, Instructor  
University of Illinois at  
Chicago  
5/1998 to 2/2000

- Consulted University faculty and staff on design and implementation of multimedia content for use in the curriculum.
- Created online guides, tutorials, seminar materials, and help pages relating to instructional technology.
- Researched new software applications for web and multimedia development.

SCAILAB Computer  
Center

Graduate Assistant  
University of Illinois at  
Chicago  
8/1997 to 12/1998

- Maintained a network of NT Workstations, Macs, and Novell servers in a student lab environment.
- Administered UNIX webservers and file servers.
- Researched new software for lab security, administration, and pedagogy.

Laboratory for  
Atmospheric Chemistry

Research Assistant  
University of Chicago  
9/1993 to 9/1994

- Wrote programs in C to interface laboratory experiments with networked computers.
- Assisted Professor Jon Abbatt in many aspects of research including designing experiments, building equipment and analyzing results.

Laboratory for  
Atmospheric Probing

Research Assistant  
University of Chicago  
5/1993 to 9/1993

- Developed computer simulations in C to model rain drop distributions and mixing.
- Analyzed 3-D radar data and created graphical charts.

Laboratory for  
Astrophysics and Space  
Research

Research Assistant  
University of Chicago  
5/1992 to 9/1992

- Developed computer programs in C to analyze sequences of digital images of the Sun.

- [National Science Foundation](#) • Selected and edited scientific research articles intended for press releases.  
Science Intern  
Washington, D.C.  
6/1990 to 9/1990

## **Computer Skills**

Expert: Flash ActionScript (AS1 and AS2)  
Advanced: Python, C++, JavaScript, DHTML, PHP, Java  
Proficiency: OpenGL, DirectX, Microsoft MFC, MySQL, XML, Perl  
Competency: Java Servlets, JSP, Apache Webserver Administration

## **Education**

[University of Illinois at Chicago](#) Graduate studies in [Computer Science](#)  
Chicago, Illinois Academic interests: computer graphics, visualization, and animation.

[University of Chicago](#) B.A. in [Physics](#)  
Chicago, Illinois Academic interests: physics, astrophysics, and geophysics

[Christian Brothers High School](#) Graduated with honors  
Memphis, Tennessee

References can be made available upon request.