

# Jason Walker-Yung

## Education

MS, COMPUTER SCIENCE, New York University, 1998  
Concentrations: computer graphics, multimedia, visualization.

BS, APPLIED MATHEMATICS AND STATISTICS, SUNY at Stony Brook, 1996

## Tutor

### Adult Learning and Resource Center, Consortium for Workers Education/1199 Training and Upgrading Fund

2002-present

Tutoring adults in GED- and CUNY-level math for two hours per week.

## Developer

### N Space Labs, Inc. (<http://www.nspacelabs.com/>)

2001-2003

- Built web-based map catalog for browsing documents, allowing users to search through over 1000 maps and related documents, and for ordering hard copies of documents. Technologies included Perl, PHP, and MySQL.
  - Designed and implemented templates for browsing documents.
  - Built admin tools to maintain user access and view orders.
  - Wrote scripts to automate updates to the database.
  - New catalogs for new clients could be added in an hour.
- Created interactive online map system ("FlashMap") for browsing geospatial data (for example, Census information). Technologies included Linux, C/C++, Perl, PostgreSQL, MySQL, and Macromedia Flash. See <<http://nspacelabs.com/demos/index.phtml>>.
  - Designed and built the client application using Macromedia Flash.
  - Wrote server-based programs to convert map shape files to Flash and database tables.
  - Wrote server scripts to retrieve maps and metadata via Flash application.
  - Researched and implemented algorithms for such tasks as spatial indexing to speed lookups and polygon simplification for optimizing bandwidth and performance.
  - Installed and configured Linux to support server based programs.
- Redesigned N Space Labs corporate website.
  - Built admin tools to allow marketing and sales staff to maintain website content.
- Wrote documentation for all of the above.

## Web Engineer

### Jupiter Media Metrix (now Jupitermedia) (<http://www.jupiterresearch.com/>)

2001

- Developed and supported in-house inquiry management application. Technologies included Kana, Windows NT Server, SQL Server, Solaris, Oracle, VBScript, VBA, JavaScript, Java, XML, and XSLT.
  - Added fields to database and customized forms; created queries to populate these fields.
  - Fixed scheduling bugs, correctly putting appointments in MS Exchange/Outlook calendars.
  - Performed system maintenance and software installation.
  - Coordinated with IT staff to resolve performance issues and with DBAs to resolve data integrity issues.

- Developed research site, where clients could browse research documents. Technologies included BroadVision, JavaScript, Netscape Enterprise Server, and Oracle.
  - Rewrote queries to reduce loading time of key pages up to 100 times faster.
  - Built in-house web-based version control/rollout system for coordinating development and deployment.
  - Fixed and optimized search module to get faster, more accurate results.
- Developed JMM marketing site, where prospective clients and members of the press could obtain more information about the company. Technologies included MySQL, Perl, shell scripts.
  - Created forms for storing form responses.
  - Wrote scripts to send daily reports to marketing staff.
  - Set up staging server and rollout scripts, similar to above.

## **WEB APPLICATIONS DEVELOPER**

### **MaMaMedia, Inc. (<http://www.mamamedia.com>)**

1998-2000

- Created constructive fun activities for children on the web. For an example, see Flipsticks: <<http://www.mamamedia.com/activities/flipsticks/home.html>>. Custom versions of many of these activities were sold to companies like General Mills, Nintendo, and Crest. Technologies included Java and Flash.
  - Worked with graphic designers and content producers to maximize enjoyment and ease of use.
  - Led teams of 2-4 developers.
- Developed server-side technology in support of the above applications. Technologies included CGI/Perl and Oracle.
- Design involvement in both client-side interface and application architecture.
- Wrote technical briefs and documentation.
- Advised sales and marketing staff on product and sales considerations.
- Taught in-house JavaScript course for 15 students.

### **Research Assistant/Consultant**

#### **Media Research Lab, New York University**

1998-1999

Ported Ken Perlin's Quikwriting applet to Palm OS platform (as seen on Slashdot). "Quikwriting" is an input method for pen-based handheld devices that can enter many characters at a time without lifting the pen. For a demonstration, see <<http://www.mrl.nyu.edu/~perlin/demos/quikwriting.html>>.

#### **Research Assistant (Developer/Webmaster)**

#### **Program for The Human Environment, The Rockefeller University**

1997-present

- Designed and developed "Loglet Lab" analysis tool. Loglet Lab provides fitting and visualization of logistic growth models; a detailed description and documentation can be found at: <<http://phe.rockefeller.edu/LogletLab/>>.
  - Hundreds of users worldwide, including NASA, McKinsey and Associates, and NYU Stern Business School.
  - Designed and developed application for Windows using Microsoft Visual C++. Currently porting to Java.
- Co-authored two papers on logistic analysis.
- Assembled and analyzed data from various sources to support ongoing research.
- Administered web server and redesigned web site (twice).

## **RESEARCH ASSISTANT**

### **National Synchrotron Light Source, Brookhaven National Laboratory**

1996

Worked in computed microtomography group Produced 3D and 2D renderings from tomographic data. Made enhancements to processing program for use with large samples. Installed hardware for SGI workstations.

### **Publications**

- A Primer on Logistic Growth and Substitution: The Mathematics of the Loglet Lab Software. *Technological Forecasting and Social Change*, 61(3), 1999.
- The Loglet Lab Software: A Tutorial. *Technological Forecasting and Social Change*, 61(3), 1999.

### **Professional Associations**

Association for Computing Machinery (ACM)