

Dave L. Cohen

428 Tanager Lane
Chapel Hill, NC 27517-6455

Voice : 919-542-6611/919-699-2848
Email : dlcohen@alleycatsw.com

I am seeking a telecommuting or part-time position where I can apply my range of technical skills, notably: PHP, MySQL, JavaScript, jQuery, HTML, CSS, XML/ XSL, AJAX, Apache. I've been working with Internet technologies since the early 1990s, and in that time have used many systems and software platforms. While I have worked at both the client and server spectrums, I am more experienced and skilled developing dynamic client and server code. I prefer small, fast-moving teams where I can make a difference. I am self-motivated and excel at working independently.

Much of the web development I've done is handcoded, following software development standards for maintainability and structure, including object-oriented approaches, which allows for modular testing. Other work includes enhancement and customization of ecommerce sites, allowing for integration with Amazon, Google, and other third party systems. Several projects were built on VPS (virtual private servers), requiring use of SSH, Linux, Apache, .htaccess, SSL, and other skills/technologies. This is in addition to managing local test versions of sites using similar software, but on top of Windows.

By working with ecommerce sites, I've developed strong problem-solving skills over the years. These are complex systems which frequently need innovative solutions and custom coding to work exactly as desired. Good coding practices and testing are especially important to prevent issues with new features. Similar skills were needed for large, complex projects such as the video-centric Bamboo Data Systems site described below.

In the past year, much of my work has focused on making sites responsive and mobile friendly, utilizing mobile web tools such as Twitter Bootstrap. The Bamboo Data Systems site discussed below presents mobile users with a new interface and subset of features, while changes to the Chatham Animal Rescue and Education site used an innovative on-the-fly conversion of pages using cURL.

Self-Employed Developer

428 Tanager Lane, Chapel Hill, NC 27517

Web Site: Bamboo Data Systems <http://www.bamboodatasytems.com>

- Comprehensive medical training system with video search, quiz subsystem, lecture system, and more.
- Developed from scratch using handcoded HTML, CSS, Javascript, jQuery, MySQL.
- Designed, enhanced database. Built migration tools to upgrade database.
- Subversion version control system used.
- Rolling database backup system, as well as on-demand admin interface to backup.
- Multi-level user access – user, site, institution, admin. Self-registration system, as well as anonymous IP based logins.
- Reports and quiz certificates can be output in PDF format using backend tool that converts HTML to PDF.
- Mobile version provides subset of features with responsive interface.
- Mostly object-oriented PHP, allowing for individual class testing. Procedural code also follows most OO design goals with well structured functions, interfaces, flexible arguments/parameters.
- Videos and other proprietary files protected at server with Apache .htaccess, output using function that feeds data.
- Videos, documents, and many other components managed with custom resource subsystem.
- Many complex SQL queries using inner joins, outer joins, grouping, nested selects, etc.
- Stylesheets for display and printed output, for site/institution/admin report generation.
- Cron jobs trigger assignment schedule and notification events within PHP.
- Session data stored in database for security.
- Tabular data elegantly presented with sortable data, driven by AJAX triggers and JSON data.
- Quiz system uses considerable parsing power, and quizzes are built using ckEditor, allowing styles, templates.
- Javascript-driven dropdown menu system.
- PHPMyAdmin used for database testing, query building.
- Display can be customized by institutions.
- Integration with user management in some affiliate institutions.

Web Site: CapriFlavors/CucinaAmorosa <http://www.capriflavors.com> , <http://www.cucinaamorosa.com>

- Ecommerce sites built using Zencart store software. Zencart is PHP/MySQL based.
- Integration with ShipRush FedEx interface using XML, allows streamlined administration of product shipments.
- Added package tracking system, low stock notification system.
- Set up Google product feed system for SEO, generating XML file.
- Implemented Amazon Checkout integration. This required fixing/modifying their code, including implementation of

semaphore system to prevent order duplications from Amazon callbacks.

- Moved both ecommerce systems to VPS (virtual private server). VPS runs Linux/Apache.
- Sites secured with SSL and htaccess on critical directories.
- Custom rolling database backup driven by cron and Linux script.
- Bar code system set up on invoices.

Web Site: Chatham Animal Rescue and Education <http://www.chathamanimalrescue.org>

- Animal rescue organization's adoption web site.
- Dynamic home page cached as needed for increased traffic scalability and performance.
- Custom home page scrolling galleries built with jQuery tools.
- Site uses HTML, CSS, PHP, MySQL.
- Built by hand, based on earlier site (which I also built) constructed with Perl on the backend.
- Integrates with Petfinder to upload information using Linux cron jobs and embedded FTP in PHP.
- Excellent SEO results for targeted keywords.
- Built responsive, mobile interface which uses cURL to retrieve existing pages for instant translation into responsive pages.

Web Site: Lumby Books <http://www.lumbybooks.com>

- This site highlights author's novel series.
- Hand coded in PHP, jQuery, Javascript.
- Custom menu system in Javascript, utilizing DOM.
- Animation on pages uses a custom animation system built on Javascript, DOM, and absolute/relative CSS positioning.

Web Site: Gail R.Fraser <http://www.gailrfraser.com>

- This site highlights artist's galleries.
- Hand coded in PHP, jQuery, Javascript.
- Customized image gallery.
- Print administration panel stores data in mySQL database, automates image sizing in uploads with ImageMagick.

Web Site: Alleycat Software <http://www.alleycatsw.com>

- This site highlights developer's work.
- Hand coded in PHP, jQuery, Javascript.
- Uses Twitter Bootstrap, with style modifications, to create responsive site.

Web Site: Instruction Set, Inc.

- Course registration system build using ASP and Microsoft Visual Studio web application framework.
- Early implementation of ASP required many innovative workarounds to problems/shortcomings in the software.
- Microsoft Access database.
- Integrated Crystal Reports for flexible reporting, including dynamic sorting, searching.

Course Development: Instruction Set Inc., ElementK, SmartPlanet

- Courses include: Visual Interdev, HTML/DHTML, VBScript, JavaScript, ASP, ADO, Apache, CGI/Perl, XML, Visual Studio. ASP.NET/VisualBasic.NET/XML, MS IIS, Object Oriented Technology, ASP, Java, C/C++, CGI/Perl, SQL Server, Apache, Visual Basic, and C++.
- Built custom XML/XSL tools for course demos. Early XML implementations worked across the major browsers.

Software: Capital Gainz <http://www.alleycatsw.com/capgnz.php>

- Windows-based portfolio management software, a top pick by the AAII Computerized Investing book and PC Computing magazine.

Writing: Technology/Business Publications

- Excellent writing/communications skills.
- Published in computer magazines including Microsoft Systems Journal, Computer Language, LAN Technology.
- Wrote the biweekly computing column for Triangle Business Journal in Raleigh NC.
- MS Systems Journal article on multi-tier ecommerce using XML/ASP (<http://www.microsoft.com/msj/0200/aspxml/aspxml.asp>) includes working examples.

Global Logistics Venture: Senior Software Engineer **113 Edinburgh S, Ste 100, Cary, NC 27511**

- Part of Global Architecture team to redefine EDI products. Designed and developed TCP/IP client/server code to connect SunOS applications to VAX VMS. Designed and developed C++ library for TCP, UDP, and DECnet.

Data General: Senior Software Engineer **62 T.W. Alexander Drive, RTP, NC 27709**

- Led effort to rearchitect DG's ANSI-standard SQL database manager from proprietary operating system to standard client/server configuration. Constructed complete design and functional specifications for the project, based on emerging industry standards for remote database access. Interactive and precompiled SQL access was provided for C applications on DOS and UNIX client front-ends, which communicated with the high-performance database server. Multi-platform coding using C and LEX regular expression tokenizer and YACC compiler builder.
- Designed and led development effort for DG/SQL (relational DMBS) and INFOS (hierarchical DBMS) Connection Server products, which provide high performance and large user count support by implementing a single shared request queue architecture running over X.25, ISO TP4/IP, shared memory, or a proprietary high-speed bus.
- Developed the user interface for Data General's relational database manager, DG/SQL. Added embedded and call-level support for additional languages. Modified the SQL syntax so that it conformed to the ANSI standard.

Technical Experience:

- Operating Environments: Microsoft Windows, UNIX, Linux, X Windows, Plesk, cPanel, WHM.
- Web Software: PHP, SQL, Javascript, jQuery, AJAX, ASP/ADO, HTML, CSS, XML/XSL, CGI/Perl, Bootstrap, osCommerce, ZenCart, jCarousel, Ecommerce, PEAR, SSL, Flowplayer, SEO, JWPlayer, Amazon Checkout, Paypal, Authorize.net, Google Wallet, Google Product Feed, Wordpress, Microsoft Visual Studio, Subversion, Crystal Reports, Git version control, Python, Perl, LEX/YACC regular expression based compiler/tokenizer, credit card gateways.
- Communications and Networking: TCP/IP, HTTP/HTTPS, FTP, MS IIS, Apache, SMTP, Ethernet.

Education:

- Georgia Institute of Technology, Bachelor of Science in Information and Computer Science. Graduated Highest Honors, with a 3.8/4.0 GPA (Co-op Plan).

Hobbies and Interests:

- Bowling, carry 210+ average and have participated in several regional professional events.
- Golf.
- Coach my children in baseball, football, basketball, golf, bowling.
- Pets: cats, dogs.