Charles Munson

Current Address		*Permanent Address*
France	jetwhiz@jetwhiz.com	Florida, USA
	http://www.JetWhiz.com	

OBJECTIVE To obtain a software development or web programming position that utilizes a wide range of computer languages.

EDUCATION

Georgia Institute of Technology GPA 3.8
Doctor of Philosophy in Electrical & Computer Engineering (Ph.D. in progress)

The University of Florida – Gainesville, Florida GPA 3.8, w/ honors
Bachelor of Science in Computer Engineering

RELEVANT KNOWLEDGE

Environments:
- ✓ Experienced in Linux, BSD and Windows environments
- ✓ Knowledgeable with Macintosh-based systems

Programming:
- ✓ Expert experience with Perl (14 years), PHP (14 years), JavaScript (15 years), C/C++ (11 years) and SQL
- ✓ Skilled with C# (7 years), Java (10 years), JSON/AJAX (Web 2.0 design), shell scripting (*Nix and Windows) and mobile application development
- ✓ Experience with assembly programming for various processors and microcontrollers (such as the MSP430 and 68HC12), including SPI communication
- ✓ Knowledge with Python, VBScript, QBasic, Pascal, ABAP (SAP), ASP.NET, Haskell
- ✓ Graphical interface (GUI) and user interface design using Java AWT and Swing, and also in C with the GTK+ toolkit and Win32 API

Markup Languages:
- ✓ Expert knowledge of HTML5, (X)HTML, DHTML and XML (incl. Atom and RSS)
- ✓ Highly experienced with document formatting and transformations using XSL/XSLT and CSS

Hardware:
- ✓ Reconfigurable computing with FPGA and CPLD devices in conjunction with VHDL and schematic design (Quartus)
- ✓ Circuit board (PCB) layout using Altium Designer (Protel)

Programs:
- ✓ Skilled with Visual Studio development (particularly with Visual Basic, Visual C++ and C#)
- ✓ Highly experienced with version control systems (VCS) such as Git, Subversion (SVN), Mercurial and Rational ClearCase
- ✓ Experience with Flash, PowerPoint, MySQL (13 years), PostgreSQL, Apache, IIS and OpenVPN
- ✓ Specialized in web design for various browser and platform niches
- ✓ Proficient with Photoshop, GIMP, various word processing programs, spreadsheets, among others

Devices and Fabrication:
- ✓ Growth and design of nitride-based semiconductor devices using MOCVD reactor
- ✓ Simulation of device designs using Silvaco, Monte Carlo simulators, among others
- ✓ Design, simulation and fabrication of GaN-based betavoltaic devices

Standards/Protocols:
- ✓ Skilled in MIME formatting, especially for use with email parsing
- ✓ Knowledgeable with the TCP / IP protocol, Telnet, SSH, FTP, SFTP, etc.
- ✓ Experience with POP3, IMAP and SMTP protocols

Skills:
- ✓ Experience with cross-platform networks
- ✓ Design for compatibility, accessibility and Search Engine Optimization (SEO)
- ✓ Knowledgeable in virtualization and creating VPNs (Virtual Private Network), particularly for secure networking and information security, including NAT and

firewall setup
- ✓ Security-oriented design, including encryption and protection from directory traversal, cross-site request forgery (CSRF) and cross-site scripting (XSS)
- ✓ Experienced with various data structures and design patterns in software development, and familiar with numerous software development models
- ✓ Very fast learning with computers for quick familiarization with new environments, programs, and languages.

EXPERIENCE   **CEMi4 LLC**
Founder, CEO
- ✓ Created company aimed at making security-focused, cutting-edge mobile applications, as well as supporting server software and websites
- ✓ Managing Windows port of EncFS filesystem encryption software, to be used as foundation for planned product in near future

Georgia Institute of Technology
PhD Student, CNRS Researcher
- ✓ Research cutting-edge betavoltaic and battery technologies
- ✓ Simulate designs to estimate possible expected efficiencies and layouts
- ✓ Design and fabrication of efficient betavoltaic devices utilizing GaN-based semiconductor materials and Ni-63
- ✓ Worked with various partners in Paris to ensure project successfully meets all deadlines and goals

-- jackelow.gjye.com
Convergence Innovation Competition
- ✓ Worked in group for class project to design a mobile application to aid in smart and sustainable communities
- ✓ Helped to create product that will enhance the study abroad experience for students at GTL, allowing them to make new friends and plan events together
- ✓ Team worked together to create a RESTful API (returning JSON), a Web App (utilizing PHP, jQuery and HTML5), native Android App and project website

Graduate Teaching Assistant
- ✓ Instructor and Assistant for Circuits I course – give lectures, exams, quizzes, homework and oversee lab periods
- ✓ Teaching Assistant for Networking – aid in preparation of labs and projects

Mentor for undergraduate students
- ✓ Mentor in ORS and SURE programs – meet and consult with undergraduate students working in research lab (and remotely in Atlanta), help to oversee project

BDE President
- ✓ Organize and manage events and school projects with other BDE members
- ✓ Act as school liaison for interscholastic coordination and events
- ✓ Help school staff with planning and execution of fairs and business

The Global Aircraft Organization
 -- GlobalAircraft.org
Founder, head webmaster
- ✓ Maintain large-scale website
- ✓ Coordinate volunteers' activity and help visitors with various questions, suggestions and problems
- ✓ Built and maintained efficient database structures for storing data for thousands of members
- ✓ Devised numerous plans to maintain the security of the system and member information
- ✓ Optimized the formatting and execution of scripts to easily handle over a million page views each month

-- search.GlobalAircraft.org
Inventor and designer for Iungam Search Engine Suite
- ✓ Designed suite of specialized search engines and web crawlers for data mining
- ✓ Created and maintain database to store search engine data

-- Gjye.com, galire.GlobalAircraft.org
Inventor and designer for Gjye 4GL Programming
- ✓ Conceptualized the Gjye language, its behaviors and structures
- ✓ Engineered requirements and devised Perl-based prototype to Gjye (GALiRe)

✓ Began writing the finalized C++ implementation

Dynetics
Engineer III (Software development)
- ✓ Worked with C++ and VB.NET in order to help develop system to generate simulation input data
- ✓ Led development of congressional web application written in ASP.NET and C# (in Visual Studio), coupled with IIS and PostgreSQL
- ✓ Taught 'Advanced Web Development and Regular Expressions' company course
- ✓ Presented 'Distributed Version Control' to company as alternative VCS system

CHREC: High-performance Reconfigurable Computing
REU Scholarship Researcher
- ✓ Aided with development of RCML prototype – a graphical, system-level planning and simulation tool for exploring algorithm and architecture RC designs

MIT: Lincoln Laboratory
Summer Intern (HR and Group 64 -- Advanced Satcom Systems and Operations)
- ✓ Worked with Human Resources, further developing presentation and customer interaction skills
- ✓ Researched feasibility of developing a system to find highly-skilled diversity candidates in an automated fashion
- ✓ Studied SAP (and HR ABAP) in order to develop user-friendly, custom reports of employee training records
- ✓ Additionally worked with the Communications and IT division, helping to write the parser and message logger for their satellite communication software

Hydra Project
Software and hardware developer
- ✓ Wrote software daemon in C that interfaces with USB sensor device and MySQL database for both Windows and Linux
- ✓ Designed Java software and GUI for monitoring hardware sensors from a third party computer
- ✓ Helped to program sensor hardware (built around an MSP430 uC) and design PCB for sensor hub in Protel
- ✓ Aided in development of protocols for sensor-to-hub and hub-to-computer communication
- ✓ Finished project for senior design course

BACKGROUND I have been working in web software engineering for over fifteen years, and have mastered (X/D)HTML, PHP, Perl, XML (and XSL/XSLT), JavaScript, (My)SQL, CSS and many other web design-based languages. Standards compliance (W3C/WHATWG) and clean programming are of high importance. Over time I have learned to quickly and cleanly develop web pages and programs with tight deadlines. I also design websites and programs with compatibility and security in mind; I have, for instance, spent much time studying SQL injection and cross-site scripting (XSS) methods in order to protect against them.

I also have over ten years of experience in applications programming, primarily with C, C++ and Java. Some software development models I have worked with include Extreme Programming, the waterfall model, iterative, evolutionary, and spiral development. Additionally I have studied various design patterns in order to further my abilities in system planning and design. I can work strongly in both a team environment and independently.

I am the manager and webmaster of GlobalAircraft.org (Global Aircraft Organization), as well as the webmaster and creator of the Iungam (search.globalaircraft.org) search engine and crawler suite, the Gjye programming language (gjye.com), the GAiNE encryption program (on Global Aircraft), a web-based email interface (written in GALiRe), and various other technologies. I have created both company and personal websites and am experienced with hosting (HTTP/FTP) and setting up servers with Perl, PHP, PostgreSQL / MySQL and Apache technologies (particularly the LAMP/WIMP infrastructures).

Currently I am studying Ruby, Python and Haskell in order to broaden my options when choosing a language for design.