

Gregory Fiumara

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Objective

Seeking a computer scientist position in which professional experience in biometrics programming and systems design and administration will enhance an organization's efficiency in achieving its goals, both short and long-term.

Experience

National Institute of Standards and Technology - Gaithersburg, MD, Computer Scientist 06/08 - Present

- Co-authored NIST's FpVTE2012 large-scale distributed one-to-many fingerprint evaluation API and supplemental software distributions.
- Co-authored the NIST Image Group's *BiometricEvaluation Framework*, a collection of well documented and POSIX compliant C++ classes simplifying biometric evaluation test-driver code for rapid results.
 - Significant hierarchies include image decompression, biometric file format parsing (ANSI/NIST-ITL 2007, INCITS 378, INCITS/ISO/IEC 19794), data storage abstractions, automatic memory management, distributed deployment, and more.
- Served as liaison and sole developer for NIST's Ongoing MINEX and PFTII biometric evaluations.
 - Successful completion of Ongoing MINEX is the first step in the "PIV (FIPS 201) compliance" of a fingerprint template extractor and matcher.
- Supported various aspects of NIST's MINEX II, ELFT, NFIQ2, IQCE, and IREX III biometric evaluations.
- Provided development support to the NIST Biometric Image Software (NBIS) team.
- Administered and gave purchasing advice on Linux/Windows clusters, Cisco Ethernet switches and fibre directors, and multi-hundred TB StorNext parallel file systems running atop redundant Promise and EMC SANs with tape archival.
- Designed and developed a web application using PHP/PostgreSQL for export-controlled software distribution.

Gregory Fiumara - Frederick, MD, Sole Proprietor 01/10 - Present

- Developer of iOS applications, including *DAS Calculator* and *Picture Sleuth*.
- Moderately active in developer circles, including GitHub (gfiumara) and Stack Overflow (277718).
- Ad-hoc consultation and service for various businesses, including custom iOS app development, Mac OS X Server support, and web app installation/configuration.

The Retriever Weekly, UMBC's Student Newspaper - Baltimore, MD, Webmaster 01/10 - 08/10

- Fix, customize, and optimize the aging PROPS content management system.
- Create HTML5/CSS3 templates for PROPS based on designs created by the Production Manager in Adobe InDesign.

The Retriever Weekly, UMBC's Student Newspaper - Baltimore, MD, Technology Manager 10/06 - 12/09

- Help lab users overcome computer difficulties, ranging from networking or other account problems to support for various Adobe publication products and in-house web applications.
- Oversee technology staff while maintaining and improving lab infrastructure. Work closely with UMBC IT.

Department of Computer Science at UMBC - Baltimore, MD, Grader 02/08 - 05/08

- Grade approximately forty Java projects biweekly for CMSC 202 - Computer Science for Majors II.

Five Guys Burgers and Fries - Frederick, MD, Assistant Manager 11/04 - 02/07

- Responsibilities include all aspects of food preparation, restaurant cleanliness, and customer satisfaction.
- Oversee crew employees, handle food orders, scheduling, payroll reports, franchise and health department compliance, public relations, and all monetary concerns (trusted with thousands of dollars in cash daily).

Education

- Johns Hopkins University - Baltimore, MD** **09/10 - Present**
- 4.0 GPA.
 - Pursuing MS computer science, part-time.
 - Expected graduation August 2012.
 - Notable courses:
 - Design Patterns (A)
 - Distributed Development on the WWW (A)
 - Mobile Application Development for the Android Platform (TBD)
 - Web Application Development with Servlets & Java Server Pages (TBD)
- University of Maryland, Baltimore County - An Honors University in Maryland** **02/10 - 08/10**
- 4.0 GPA.
 - Pursuing MS computer science, part-time.
 - Notable courses:
 - Principles of Database Systems (A)
 - Transferred to Johns Hopkins University.
- University of Maryland, Baltimore County - An Honors University in Maryland** **08/06 - 12/09**
- 3.72 GPA.
 - BS computer science, cum laude.
 - Received Certificate of General Honors from the UMBC Honors College.
 - Selected for membership in honor societies (Phi Kappa Phi, Golden Key, Omicron Delta Kappa, Kappa Theta Epsilon).
 - Notable courses:
 - Algorithms (B)
 - Computer Forensics and Intrusion (A)
 - Computer Networks (A)
 - Mobile Platform Development: iPhone & iPod (A)
 - Principles of Operating Systems (A)
 - Scripting Languages (A)
- Frederick County Career and Technology Center - Frederick MD** **08/03 - 06/05**
- 4.0 GPA.
 - Completed CompTIA A+ and Cisco CCNA curricula.
 - Member of SkillsUSA.
 - Represented Maryland at National Conference in 2004 for Job Skill Demo and in 2005 for Cisco Internetworking (9th in USA).
- Walkersville High School - Walkersville, MD** **08/02 - 06/06**
- Diploma with highest honors.
 - Member of the National Honor Society and National Technical Honor Society.
 - Section leader of a top five Atlantic Coast drumline.
 - Member of various musical ensembles (percussion).

Skills and Tools

- Skilled with the Mac OS, Linux and UNIX derivatives (RHEL/CentOS, Ubuntu, FreeBSD), and Windows.
- 4+ years professional experience in C, C++. 3+ years personal experience in Objective-C with CocoaTouch, Java. Collegiate experience with Java and countless other languages and SDKs.
- Source code management with Perforce, Git, Mercurial, and Subversion.
- Defect tracking with Bugzilla, Trac.
- IDE experience with Xcode (Objective-C), Eclipse (Java).
- Proficient with vim.

Publications

- Watson, C., W. Salamon, and G. Fiumara. *Fingerprint Vendor Technology Evaluation Participant's Guide*.
- Cheng, S., G. Fiumara, and C. Watson. NISTIR 7821. *PFTII Report: Plain and Rolled Fingerprint Matching with Vendor Proprietary Template*.
- Grother, P., et. al. NISTIR 7836. *IREX III: Performance of Iris Identification Algorithms*.
- Salamon, Wayne and Gregory Fiumara. NISTIR TBD. *Biometric Evaluation Common Framework*.

Conference Attendance

- NFIQ2 Workshop, International Biometric Performance Testing Conference. NIST. 5 March 2012. Gaithersburg, MD, USA.
- iOS 5 Tech Talk World Tour. Apple. 13 January 2012. New York, NY, USA.
- Biometric Consortium Conference & Biometric Technology Expo. Biometrics Consortium. 27-29 September 2011. Tampa, FL, USA.

Continued Education

- Biometric Identification: Theory, Algorithms, and Implementation. UCLA, Dr. Jim Wayman. 25-27 July 2011. Los Angeles, CA, USA.

Awards and Honors

- *Worldwide Developer Conference (WWDC) Student Scholarship*, Apple, Inc, 2010.
- *The "Semper Fidelis" Award for Musical Excellence*, United States Marine Corps High School Awards Program, 2006.
- *9th place in USA*, Cisco Internetworking, SkillsUSA National Leadership Conference, 2005.