

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.