Society

# EDUCATION:

1995	Ph.D.	George Mason University	Information Technology
1991	MS	University of Southern California	Systems Management
1990	MS	Naval Postgraduate School	Operations Research Systems Analysis
1980	BS	United States Military Academy	Mathematics
1980	BS	United States Military Academy	Mathematics

#### **PROFESSIONAL ACTIVITIES:**

2001-present	Member, Military Officers Association of America
1997-2001	Volunteer database consultant, Military Operations Research
1996-2012	Member, Military Operations Research Society
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1994-1995 Finance Chair, 2nd International Conference on Multimedia Computing and Systems (ICMCS95)

1984-2012 Member, Association of the United States Army

## SUMMARY OF QUALIFICATIONS:

- Over four years of experience teaching college computer science courses to both graduate and undergraduate students at Georgetown University in Washington DC.
- Over thirty years of experience leading teams, managing projects, and directing operations.
- Supervisory and project management responsibility for information technology teams including:
  - Systems analysis
  - Requirements specification
  - Database management
  - Knowledge management
  - Data warehousing
  - Software engineering
  - Electronic messaging
  - Network and data center design and operations
- Former United States Army Officer. Retired from active duty as a Lieutenant Colonel in 2001 after 21 years of highly successful service and consistent advancement in rank.
- In 1992 was one of fewer than 40 officers selected annually to participate in the Army's doctoral program. Conducted research in parallel computing and information retrieval resulting in 5 conference publications, and 2 journal publications.
- Since retiring from the Army have served as Director and Vice President for start-up technology companies and as an independent information technology consultant.
- Experience using a wide range of technologies including: Fortran, APL, Pascal, C, C++, Ruby, Python, VB, VBA, ODBC, SQL, PHP, SAS, SPSS; CPM, DOS, Windows, Unix, Linux, OS-X; MS Word, MS Excel, MS Access, MS PowerPoint, MS Visio, MS Outlook, MS FrontPage, WordPerfect, Paradox, Quattro Pro, FoxPro, Statgraphics, PGP, MySQL; SOHO Networks and Virtual Private Networks, Intel Hypercube Parallel Computing.

## **EMPLOYMENT HISTORY:**

#### 2014-present: Assistant Teaching Professor,

Computer Science Department, Georgetown University, Washington, DC

### 2014-2015: Visiting Assistant Professor,

Computer Science Department, Georgetown University, Washington, DC

#### 2010-2014: Adjunct Assistant Professor,

Computer Science Department, Georgetown University, Washington, DC

## 2003-present: Independent Contractor, Gray Stone Technologies

- Provide information technology consulting services to government and corporate clients.
- Areas of expertise include technical team leadership, project management, requirements definition, database application design and development, operations research, systems analysis, information retrieval, and data analysis, small office/home office networking, wireless network security, disaster recovery planning and implementation.

2002-2003: Director, Messaging Practice, Agilera, Inc. (formerly United Messaging, Inc. (UMI))

- Directed a production staff of 30 senior messaging application engineers and architects delivering outsourced electronic messaging services to over 40 national and international corporate clients including Best Western, Wilhelmsen, and McDonalds.
- Responsible for annual revenue in excess of \$9.5 million.

**2001-2002:** Vice President, Technology and Infrastructure, United Messaging, Inc. (UMI) – a startup information technology outsourcing company

- Directed a production staff of 30 senior infrastructure engineers and architects supporting outsourced messaging operations for national and international corporate clients.
- Assumed control of UMI's Virginia office and five distributed data centers. Reorganized the staff to most efficiently and effectively accomplish assigned engineering functions.
- Served as Chief Security Officer reporting directly to the CEO. Managed the implementation of industry standard disaster recovery plans within all production data centers.

**1999-2000:** Director, Strategic and Advanced Computing Center (SACC), Office of the Chief Information Officer (CIO), US Army, Washington, DC

- Assigned to a full Colonel position serving as director of the SACC, a leading-edge technology center consisting of more than 70 personnel with a \$15 million annual operating budget.
- Directed Army Knowledge Online (AKO), the Army's \$65 million advanced computing, knowledge management, and Internet/Intranet program.
- Designed and constructed a multi-million dollar AKO data center to support expansion to over 1 million users. Relocated all AKO production infrastructure and technical support staff to this new data center with no downtime for worldwide users throughout the Army.

## 1980-1999: Served in various Army technical and leadership assignments including:

Chief, Knowledge Engineering Group	Strategic and Advanced Computing Center, Pentagon
Information Management Officer	Assistant Secretary of the Army (FM), Pentagon
Operations Research Officer	Army Budget Office, Pentagon
Systems Development Officer	Army Program Analysis and Evaluation, Pentagon
Company Commander	175 <sup>th</sup> Theater Finance Command, Seoul Korea
Comptroller	US Military Support Element, Grenada, West Indies
Executive Officer	C Battery, 1 <sup>st</sup> Battalion, 39 <sup>th</sup> Field Artillery, Fort Bragg, NC
Fire Direction Officer	C Battery, 1 <sup>st</sup> Battalion, 39 <sup>th</sup> Field Artillery, Fort Bragg, NC

# **PUBLICATIONS:**

- 1. W. A. Woods, S. Savaram, O. Frieder, A. K. Sood, G. Frieder, T. Bottegal, "An Overview of the Future Demands of Multimedia Systems," *Next Generation Information Technology Systems*, Haifa, Israel, June 1993.
- 2. W. A. Woods, O. Frieder, and B. Kjell, "Visualization for Discrimination of Authorship with Military Applications," *Defense Analysis Seminar VII*, Seoul, Korea, September 1993.
- 3. B. Kjell, W. A. Woods, and O. Frieder, "Discrimination of Authorship Using Visualization," *Information Processing and Management*, Pergamon Press, Jan-Feb 1994.
- 4. W. A. Woods, H. D. Moser, O. Frieder, and Paul B. Kantor, "An Experimental Evaluation of Task Scheduling on Reconfigurable Multicomputer Architectures," *IEEE Seventh International Conference on Parallel and Distributed Computing Systems (PDCS94)*, Las Vegas, Nevada, October 6-8, 1994.
- 5. W. A. Woods, H. D. Moser, O. Frieder, and Paul B. Kantor, "A Case for Reconfigurable Parallel Architectures for Information Retrieval," *ACM Third International Conference on Information and Knowledge Management (CIKM94)*, Gaithersburg, Maryland, November 29 December 2, 1994.
- W. A. Woods, H. D. Moser, O. Frieder, and Paul B. Kantor, "A Simulation Evaluation of Task Scheduling on Reconfigurable Multicomputer Architectures," selected paper from *IEEE Seventh International Conference on Parallel and Distributed Computing Systems (PDCS94)*, Las Vegas, Nevada, October 6-8, 1994, revised to appear in *International Journal of Computer Systems Science & Engineering*, CAL Publishing Ltd.
- W. A. Woods, H. D. Moser, O. Frieder, and P. Kantor, "A Simulation Evaluation of Task Scheduling on Reconfigurable Multicomputer Architectures," *Computer Systems: Science and Engineering*, CRL Publishing, 10(4), pp. 244-254, October 1995.
- 8. B. Kjell, W. A. Woods, and O. Frieder, "Information Retrieval using Letter Tuples with Neural Network and Nearest Neighbor Classifiers," 1995 International Conference on Systems, Man and Cybernetics, Vancouver, British Columbia, Canada, October 22-25, 1995.
- Leonard Tharpe, Charles A. Wells, and W. Addison Woods, "Army Knowledge Online (AKO) -Sharing the Army's Information Resources," *Armed Forces Comptroller*, vol. 44, no. 1, pp. 23-26, Winter 1999.
- 10. W. Addison Woods, "Still No Silver Bullet: Managing and Improving the Software Development Process", *Armed Forces Comptroller*, vol. 44, no. 1, pp. 33-36, Winter 1999.
- 11. Lam, Tran, Charles Hogan, Gregory Johnson, W. Addison Woods, and Thomas Fidd, "The Headquarters Department of the Army Data Warehouse: Digitizing Army Financial Analysis," INFORMS-KORMS Seoul 2000, Seoul Korea, 19-21 June 2000.
- Lam, Tran, Charles Hogan, Lakita Conley-Ware, Gregory Johnson, and W. Addison Woods, "Emerging Technologies for Web-Enabled Decision Support Systems Using Portal Technology and Data Warehousing," The Armed Forces Communications and Electronics Association (AFCEA) 17th Annual Federal Database Colloquium and Exposition, San Diego, California, 6-8 September 2000.

#### **TEACHING EXPERIENCE:**

Semester	Course Number	Enrollment	Course Name
Fall 2015	COSC 052-01	36	Computer Science II
Fall 2015	COSC 051-02	65	Computer Science I
Fall 2015	COSC 051-01	54	Computer Science I
Fall 2015	BCHB 584-01	1	C++ Programming: Bioinformatics 1
Summer 2015	COSC 051-20	17	Computer Science I
Summer 2015	COSC 052-20	16	Computer Science II
Spring 2015	COSC 052-02	28	Computer Science II
Spring 2015	COSC 052-01	40	Computer Science II
Spring 2015	COSC 051-01	68	Computer Science I
Spring 2015	COSC 015-01	22	Introduction To CS Using Ruby
Fall 2014	COSC 051-02	63	Computer Science I
Fall 2014	COSC 052-02	13	Computer Science II
Fall 2014	COSC 052-01	19	Computer Science II
Summer 2014	COSC 051-20	10	Computer Science I
Summer 2014	COSC 052-20	15	Computer Science II
Spring 2014	COSC 051-01	43	Computer Science I
Spring 2014	COSC 052-02	27	Computer Science II
Fall 2013	COSC 051-02	53	Computer Science I
Fall 2013	COSC 052-01	15	Computer Science II
Fall 2013	BCHB 585-01	1	C++ Programming: Bioinformatics 2
Summer 2013	COSC 051-20	7	Computer Science I
Summer 2013	COSC 052-20	8	Computer Science II
Spring 2013	COSC 051-02	24	Computer Science I
Spring 2013	COSC 051-01	38	Computer Science I
Spring 2013	BCHB 584-01	3	C++ Programming: Bioinformatics 1
Fall 2012	COSC 051-02	26	Computer Science I
Fall 2012	COSC 052-01	6	Computer Science II
Summer 2012	COSC 052-20	7	Computer Science II
Spring 2012	COSC 051-01	40	Computer Science I
Fall 2011	COSC 051-02	21	Computer Science I
Spring 2011	COSC 360-01	6	Intro to Comp. Modeling and Sim.

As of the fall semester of 2015 I received a faculty appointment as a Assistant Teaching Professor with the Computer Science Department at Georgetown University in Washington DC. During the 2014 school year I held a faculty appointment as a Visiting Assistant Professor. Prior to that, all of my teaching experience was as an Adjunct Assistant Professor at Georgetown. Appointments were renewed each semester since the initial appointment in January 2011.

The BCHB courses shown above are dual listed in the graduate school handbook. Graduate students enrolled in those courses attend the COSC course that I teach. They complete all tests and assignments, as do the undergraduate students in the course. The graduate students also receive advanced assignments and instruction as determined by their faculty advisors to qualify for graduate credit. By request, I will occasionally assign more advanced work or discuss advanced programming techniques related to their specific research area. Otherwise the course content is identical to the undergraduate COSC course.