

Curriculum Vitae

Bryan S. Goda

7131 65th Ave W., Lakewood WA, 98499

(W) 253-692-4581, (H) 845-446-6588

bryan.goda@usma.edu

Qualifications

Multitalented professional in undergraduate Electrical Engineering, Computer Engineering, and Information Technology education. Capable of leading large organizations through the use of outstanding communications and planning skills. Extensive experience in team building and accomplishing complex tasks.

Professional Experience

Institute of Technology, University of Washington Tacoma

Professor and Military Liaison (2012-present)

- Institute Professor teaching in 3 programs. Supervises numerous students on internships, directed readings, and research.
- Military Liaison with Joint Base Lewis McChord. Advises the University on how to improve community relations and increase student enrollment.
- Assessment Committee Representative coordinates assessment activities and ABET program preparation.
- Director of the new Masters Program in Cybersecurity and Leadership. Responsible for Program design, administration, and admissions. Created a 6-month long capstone program.
- Director for the Information Technology Undergraduate Program. Responsible for 7 instructors and 120 students.

Supervisor: Robert Friedman, rsfit@uw.edu, ph. 253-692-4611

Department of Electrical Engineering and Computer Science, West Point NY

Deputy Department Head (2010-2012)

- Oversaw the operations of the 3rd leading undergraduate Electrical Engineering, Computer Science, Information Technology, and Core programs consisting of 72 staff and faculty. The Department teaches over 1500 students annually. Direct supervisor of the engineering support section (4), computer support group (4), and the headquarters section (3).
- Responsible for personnel hirings, contractor requirements, faculty recruiting, and teaching assignments. Approximately ¼ of our faculty turns over each year, so the recruiting quality instructors is a constantly ongoing process.
- Department Budget manager, responsible for 15 EE&CS labs and an annual operating budget of \$2M.

Association of Graduates Diversity Leadership Conference Co-Chair (2007-2011)

- Co-Chair of an annual conference sponsored by Association of Graduates centered on Diversity Leadership. The 3-day conference is now in its 11th year and has over 300 attendees. The conference is entirely funded by donor funds. The Co-Chair's main tasks are to plan the program, coordinate speakers, and organize the 50 faculty volunteers to help put on the conference. The Co-Chair also advises the Academy leadership on program content. Past speakers have included Cabinet Secretaries, Ambassadors, members of Congress, Fortune 500 CEOs, and Senior Army and Officers.

United States Military Academy ABET Committee Co-Chair (2005-2012)

- Co-Chair of a 33 member committee designated to assist the 10 engineering programs with ABET accreditation. The self studies from the 2008 visit were used by ABET as display examples at the 2009 ABET Symposium. Advised the Dean and Superintendent on latest ABET issues and changes. Attends the ABET Annual meeting and commission summits. Coordinates the Academy wide self study preparation efforts.

IT Program Director (2005-2009)

- Created an IT program in 2005 with no faculty or students assigned. The program in 5 years has grown to 7 faculty, 75 students, and 40 graduates. Coordinated with 5 other departments in the development of the program and the submission of curriculum changes.
- Prepared the program for accreditation, wrote a 300 page self study, and created an assessment system. The IT Program became 1 of 14 ABET accredited programs on its first attempt in 2008, a nationally rare event.

Information Technology Goal Team Chair (2005-2011)

- Chair of a 10 member team designated to assess the accomplishment of the Military Academy's IT goal. Tasks include benchmarking against other institutions, collecting assessment data, and writing an annual report.

Deputy EE Program Director (2001-2004)

Instructor (1993-1996)

- Developed the computer engineering section of the EE program. Recruited 100 cadets into the program over a 3-year period. Assisted the program director in curriculum development and ABET preparation.

Supervisor: COL Gene Ressler, Eugene.ressler@usma.edu, ph. 845-938-6979.

US Army, Kitzingen Germany

1996-1998

Simulations Projects Officer (1998)

Battalion Commander (1997)

Battalion Executive Officer (1996-1997)

- Designed and created simulations for four division sized headquarters for units stationed in Germany. Supervised command post exercises involving 300 soldiers throughout Germany.
- Partnership officer with a sister German Unit. Organized team building events and coordinated with the local community.
- Commander and Executive Officer of a 550 person communications unit. Provided communications to 20k soldiers over a 200sq km area over a 6 month period. Worked with military and UN Agencies from 7 other nations in Peacekeeping Operations in Bosnia Herzegovina.

US Army, Frankfurt Germany

Operations Officer (1988-1990)

- Operations Officer for a 780 person unit in the Gulf War. Earned a Bronze Star for the communications support provided to 25k soldiers moving over 300 km in 4 days.

Teaching Experience

University of Washington Full Professor with Tenure, September 2013

University of Washington Tacoma, Acting Professor, March 2012

TINFO360 Systems Analysis and Design, Spring 2012, Autumn 2012, 2013
TCSS321 Discrete Math I, Spring 2012
TCSS371 Machine Organization, Summer 2012, 2013, 2014, Spring 2014, 2015, Autumn 2015
TINFO320 Hardware and Software, Winter 2013, 2014, 2015, 2016
TCSS465 Embedded Systems, Winter 2013
TCSS322 Discrete Math II, Spring 2013, Summer 2014
TINFO497A Internship, Summer 2012, Fall 2012, Winter 2013, Spring 2013, 2014
TINFO498A Directed Readings, Winter 2013, Spring 2013, 2014
TINFO499A Undergrad Research, Winter 2013
TINFO501 Principles of Cybersecurity, Summer 2013
TINFO505 Managing a Cybersecurity Toolkit, Spring 2014
TINST401 Society and Technology, Summer 2015
TCES482A Senior Project II, Spring 2014, 2015, 2016

United States Military Academy, West Point NY – Instructor 1993, Assistant Professor 1995, Associate Professor 2002, USMA's First Professor of Information Technology 2011

EE484 Advanced Computer Architecture, Course Director, 2010
IT401 IT Senior Design I, Course Director, 2008-09
IT402 IT Senior Design II, Course Director, 2009-10
IT305 Military Information Technology Systems 2005- 07
EE301 Fundamentals of Electrical Engineering, 2004
EE484 Advanced Computer Architecture Using VHDL, Course Director, 2003-04
MS402, Transition to Officership, Intersession 1996
EE475, Introduction to Computer Architecture, Course Director, 1996, 2001-03
Platoon Trainer, Camp Buckner 1995
MS302, Combined Arms Tactics, Intersession 1995
EE302, Introduction to Electrical Engineering, Fall 1994, 1995, 2001
CS380, Introduction to Computer Organization, Course Director, 1994, 1995, 1996, 2002
EE408, Senior Design Project Advisor, 1994-96, 2002, 2003, 2004
CS402, Senior Design Project Advisor, 1994-96, 2003

Army War College, Carlisle PA – Guest Instructor while a student at the War College

182 Research & Development for Transformation, Army War College 2005

Rensselaer Polytechnic Institute, Troy NY – Taught the lab portion of the VLSI Design course
ECSE 4220 Introduction to VLSI Design, Rensselaer Polytechnic Institute, 2000-2001

Hudson Valley Community College, Troy NY – Adjunct Professor

4713 Introduction to E Commerce, Spring 2001
6315 Intermediate Algebra, Fall 2000, Spring 2001
6305 Technical Math, Fall 2000, Spring 2001, Summer 2001
4357 Systems Analysis and Design II, Spring 2001, Summer 2001
5004 Telecommunications and Information Processing, Fall 1999
6121 Computer Science II, Fall 1999, Summer 2000
4356 Systems Analysis and Design, Spring 2000, Fall 2000
6129 Engineering Tools, Fall 1999
4359 Understanding and Using the Microcomputer, Summer 1999
4350 Fundamentals of Data Processing, Spring 1999, Fall 1999
44358 Programming and Logic II, Spring 1998

Ph.D. Advisor, SUNY Binghamton 2008- Present, Capella University 2009-Present

Education and Honors

Ph.D., Computer Engineering, Rensselaer Polytechnic Institute, 2001
Masters of Strategic Studies, Army War College, 2005
Masters of Science, Electrical Engineering, University of Colorado, 1993
Bachelors of Science, Electrical Engineering and Computer Science, United States Military Academy, 1982

Distinguished Teaching Award Nominee, UWT, 2013
Black/Gold Volunteer Award (2009, 2006) – Military Academy recognition award for volunteer service
IEEE Senior Member (2006), awarded to 10% of the IEEE membership based on scholarly achievement and peer recommendations
ABET Outstanding Educator Award (2003) – Selected from a pool of 400 educators by ABET to help develop ABET directions for the future
Upsilon Pi Upsilon (2003) – Computer Science National Honor Society
Charles M. Close RPI Outstanding Electrical, Computer and Systems Engineering Doctoral Student Award (2001) - Awarded to the outstanding graduating Ph.D. student of the year
Engineer in Training (EIT 1996)
Phi Kappa Phi Outstanding Faculty Award (1996) - Chosen as the outstanding faculty member from the EECS department based on scholarly achievement and teaching performance.
Member, Signal Regiment (1995)
Member, Eta Kappa Nu (1993) – Electrical Engineering National Honor Society

Professional Societies:

- American Society for Engineering Education
- Association of Graduates USMA
- Engineer in Training (EIT) NY
- Eta Kappa Nu (Electrical Engineering Honor Society)
- Federal Asian Pacific American Council
- Institute of Electrical and Electronics Engineers, Mid-Hudson Branch, Senior Member
- National Japanese American Memorial Foundation
- Pan Pacific American Leaders and Mentors Organization
- Phi Kappa Phi
- Signal Regiment Association
- Upsilon Pi Epsilon (Computer Science Honor Society)
- United States Chess Federation

Reviewer: IEEE Transactions on Electron Devices, Special Interest Group for IT Educators, Frontiers In Education, ACM Inroads.

Professional Service:

UWT Promotions and Tenure Committee (2013-Present) – Reviews Promotions and Tenure cases for UWT.

UWT Undergraduate Academic Committee (2013-Present) Examines the content of the undergraduate core curriculum.

UWT Assessment Committee (2012-Present) Coordinates assessment efforts for the Institute.

USMA Faculty Council Diversity Subcommittee (2004-2012) Member of a Dean's committee that examines diversity issues.

Admissions Committee (2006-2007, 2009) Reviews student applications for admissions to USMA.

Center for Teaching Excellence Apgar Award Committee (2007-2012) Member of a committee that selects the most innovative instructor at the Academy.

Association of American Colleges and Universities USMA Representative (2006-2009) Member of an Academy committee that participates in summer workshops to improve the quality of undergraduate education in a globally interdependent society.

Special Interest Group for Information Technology Educators 2011 Conference Chair. Chair of annual conference attended by 150 educators that specialize in IT education advancement.

2007 Department of the Army LTC Selection Board Member.

Watervliet Arsenal Emergency Operations Officer, volunteer position to help the Watervliet Arsenal Commander in event of an emergency.

West Point Society of Albany volunteer Field Officer, interview and screen prospective cadet candidates.

Scholarly Publications

Journal Articles

High Speed Reconfigurable Circuits for Multi-Rate Systems in SiGe HBT Technology

M. Leroy, B. Goda

Proceedings of the IEEE, July 2015, pp. 1181-1196

Designing a Masters Program in Cybersecurity (Accepted)

B. Goda, T. Thompson, M. Dupuis, C. Costeralla

National Cybersecurity Institute Journal

Improving Outcome Assessment in Information Technology Program Accreditation

B. Goda, C. Reynolds

Journal of Information Technology Education, Vol 9, 2010, pp.49-59

A 12Gb/s Demux Implemented with SiGe High Speed FPGA Circuits

C. You, J. Guo, R. Kraft, M. Chu, B. Goda, J. McDonald

Transactions on Very Large Scale Integration, March 2007

Silicon Germanium Programmable Circuits for Gigahertz Applications

J. Guo, C. You, M. Chu, P. Curran, J. Diao, B. Goda, P. Jin, J. McDonald

IET Circuits, Devices and Systems, Feb 2007, pp. 27-33

A 10GHz 4:1 Mux and 1:4 Demux implemented by a Gigahertz SiGe FPGA for fast ADC

J.R. Guo, C. You, K. Zhou, M. Chu, P. Curran, D. Diao, B. Goda, R. Kraft, J. McDonald

Integration, the VSLI Journal, #38, 2005, pp. 525-540

Multi-GHz SiGe BiCMOS FPGAs with new architecture and novel power management techniques.

K. Zhou, J.R. Guo, C. You, J. Mayega, R. Kraft, T. Zhang, B. Goda and J. McDonald

Journal of Circuits, Systems, and Computers, vol. 14, no. 2, 2005, pp. 179-193

A 5-10 GHz SiGe BiCMOS FPGA with new Configurable Lock Blocks

C. You, J.R. Guo, R. Kraft, M. Chu, P. Curran, B. Goda, J. McDonald

Microprocessors and Microsystems, 2004, pp. 1-11

Gigahertz Reconfigurable Computing Using SiGe HBT BiCMOS FPGAs

B. Goda, R. Kraft, S. Carlough, T. Krawczyk, J. McDonald

Lecture Notes in Computer Science, ISSN 0302-9743, 2001

SiGe HBT BiCMOS FPGAs for Fast Reconfigurable Computing

B. Goda, J. McDonald, S. Carlough, T. Krawczyk, R. Kraft

Proceedings of Computers and Digital Techniques, Vol. 147, No. 3, May 2000, pp. 189-194

Academic Publications

Safeguarding Military Critical Technologies

Army War College Master's Thesis, Storming Media, 18 Mar 2005

SiGe HBT BiCMOS Filed Programmable Gate Arrays for Fast Reconfigurable Computing

Ph.D. Thesis, Rensselaer Polytechnic Institute, 2001

A Survey of Cache Coherency Schemes

University of Colorado, Master's Thesis, May 1993

Refereed Conference Publications

Cell Phone Forensics

B. Goda, J. Bair, C. Costarella
SIGITE 2015, Chicago IL, October 1-3, 2015

Designing A Masters Program in Cybersecurity and Leadership

B. Goda, R. Friedman
SIGITE Conference 2012, Calgary Alberta, 11-13 Oct 2012

Developing a Reconfigurable Network Lab

S. McCune, AJ Newton, B. Goda, J. Girard
SIGITE Conference 2008, Cincinnati Ohio, 15-17 October 2008

The Affective Dimension of Pervasive Themes in the Information Technology Curriculum

C. Reynolds, B. Goda
SIGITE Conference 2007, Destin Florida, 18-20 October 2007

Active-HDL, Multisim, Cadence, There has got to be a better way to teach CAD/E Tools

J. Gribshaw, P. Patterson, B. Goda
ASEE Annual Conference 2007, Honolulu Hawaii, 23-27 June 2007

A Deliberate Integration of Information Technology Into the Classroom

D. Fairfax, K. Huggins, B. Goda
ASEE Annual Conference 2007, Honolulu Hawaii, 23-27 June 2007

Faculty Development in Information Technology Education

J. Blair, D. Fairfax, B. Goda, K. Huggins, M. Lemanski, W. Suchan
SIGITE 2006, Minneapolis MN, 18-20 Oct 2006

Designing an Interdisciplinary Information Technology Program

E. Sobieski, J. Blair, J. Cook, J. Giordano, B. Goda, C. Reynolds
SIGITE 2006, Minneapolis MN, 18-20 Oct 2006

A 11 GHz FPGA with Test Applications

C. You, J. Guo, M. Chu, K. Zhou, R. Kraft, B. Goda, J. McDonald
Proceedings of the Field Programmable Logic Conference (FPL05), Paper 3.A.2
Tempere Finland, pp. 101-105, 2005

The 10GHz 4: 1 MUX and 1: 4 DEMUX implemented via the gigahertz SiGe FPGA

J.R. Guo, C. You, P. Curran, M. Chu, K. Zhou, J. Diao, A. George, B. Goda, R. Kraft
ACM Great Lakes Symposium on VLSI 2004: pp. 141-144

Outcome Assessment at the US Military Academy

L. Shay, B. Goda
2004 ASEE Annual Conference, Salt Lake City, 22-24 June 2004

Experience with Multi-Disciplinary Design Projects at the US Military Academy

P. Hanlon, B. Goda
2004 ASEE Annual Conference, Salt Lake City, 22-24 June 2004

A Scalable 2 V, 20 GHz FPGA Using SiGe HBT BiCMOS Technology

J.R. Guo, C. You, K. Zhou, B. Goda, R. Kraft, J. McDonald
FPGA 2003: pp.145-153

SiGe HBT BiCMOS Field Programmable Gate Arrays for Agile Mixed Signal Applications
J.F. McDonald, R. Kraft, K. Zhou, J.R. Guo, Y. Chao, R. Heikaus, M. Chu, B. Goda
28th Annual Government Microcircuit Applications & Critical Technology Conference
31 March - 3 April 2003, Tampa Florida, pp. 560-563

GHz FPGA by SiGe BiCMOS Technology for Low Power, High Speed Computing with Memory
C. You, J.R. Guo, R. Kraft, M. Chu, R. Heikaus, O. Erdogan, P. Curran, B. Goda, K. Zhou, J. McDonald
FPL 2003: pp. 11-20

A Scalable 2V, 20 GHz FPGA using SiGe BiCMOS Technology
J.R. Guo, C. You, K. Zhou, M. Chu, B. Goda, R. Kraft, J. McDonald
11th International Symposium of Field Programmable Gate Arrays, February 23-25 2003,
Monterey CA

A Novel Multi-Speed, Power Saving Architecture for a SiGe HBT FPGAs
J.R. Guo, C. You, K. Zhou, M. Chu, B. Goda, R. Kraft, J. McDonald
The 2003 International Conference on Engineering of Reconfigurable Systems and Algorithms
23-26 June 2003, Las Vegas Nevada

Fast SiGe HBT BiCMOS FPGAs with a new Architecture and Power Saving Techniques
K. Zhou, J.R. Guo, C. You, R. Kraft, B. Goda, J. McDonald
12th International Conference on Field Programmable Logic, 2-4 Sept 2002, Montpellier France
pp. 414-423

SiGe HBT BiCMOS FPGAs
B. Goda, J. McDonald, R. Kraft
FPGA 2001 Proceedings, August 11-13, 2001, Dublin Ireland. pp. 59-69

Reconfigurable FPGA's in the 1-20 GHz Band with HBT BiCMOS
J. McDonald, B. Goda
1st Annual Conference on Evolvable Hardware, July 19-21 1999, Pasadena Calif, pp 188-192

Non-Refereed Publications

The Cadet Chess Club Wins the Armed Forces Championship for the 3rd Time
Assembly, March 2007, pp. 26-27

Board of Education
C. Kief
Xcell Journal, Winter 2004

The Gigahertz FPGA: Design Considerations and Applications
J.R. Guo, C. You, K. Zhou, M. Chu, R. Heikaus, O. Erdogan, B. Goda, R. Kraft, J. McDonald
12th International Symposium of Field Programmable Gate Arrays, February 22-24 2004,
Monterey CA, p. 248

A four-bit full adder implemented on fast SiGe FPGAs with novel power control scheme
K. Zhou, M. Chu, C. You, C. Channakeshav, J. Mayega, J. McDonald, R. Kraft, B. Goda
FPGA 2003: p. 248

How to Develop an Assessment Plan
J. Hill, B. Goda
Fifth Annual Symposium on Best Assessment Practices, 24-26 April, 2003, Rose-Hulman
University, Terra Haute, Indiana

Implementation of a Gigahertz 1 bit Full Adder on a SiGe FPGA

K. Zhou, J.R. Guo, C. You, J. Mayega, B. Goda, M. Chu, Y. Kim, P. Curran, R. Kraft, J. McDonald

5th MALPD Conference, 9-12 Sept 2002, Laurel Maryland, pp. B1-B2

Experiences in Preparing Multiple Programs for a Joint ABET Accreditation General Review

K. Huggins, L. Shay, J. Hill, B. Goda, E. Ressler

32nd ASEE/IEEE Frontiers in Education Conference, Nov 6-9, 2002, Boston MA

Providing Communications to Task Force Eagle in Bosnia

B. Goda, D. Babb

Army Communicator, pp. 7-12, Fall 1997

One Approach to Multidisciplinary Senior Design Projects

B. Goda, A. Sayles, D. Gray

26th Annual Frontiers in Education Conference, Nov 1996

Optoelectrical Error Diffusion Neural Network

B. Shoop, E. Ressler, A. Sayles, J. Loy, G. Tait, D. Gray, B. Goda, J. Wise

MIT Website 1996

Talkin' Track

L. Bernardinis, B. Goda

Machine Design Magazine, pp. 102-110, Mar 9 1995

Teaching Computer Architecture in a PC Equipped Lab Using Turbo and Sun Assembly Language

B. Goda, D. Gray, J. Loy

25th Annual Frontiers in Education Conference, pp. 2a5.14-17, Nov 1995

HO scale model trains provide opportunities for student innovation in the laboratory

A.H. Sayles, B.S. Goda, and J.H. Wise

Proceedings of the Annual Meeting of the American Society for Engineering Education, Middle Atlantic Section, November 1994

HO Scale Model Trains Provide a Vehicle for Curriculum Fusion

B. Goda, J. Wise, M. McConkey, J. Loy

24th Annual Frontiers in Education Conference, pp. 361-365, Nov. 1994

Communications on a Mobile Battlefield in the 100 Hours War

B. Goda, R. Prudhomme

Army Communicator, pp. 42-47, Spring 1991