

CIVIL-MILITARY SYMPOSIUM

Civil-Military Cooperation and
International Collaboration in Cyber Operations

2017

November 7th - 9th

SYMPOSIUM PROGRAM

CIVIL-MILITARY

★ ★ ★ *Symposium* ★ ★ ★

UNIVERSITY OF NORTH GEORGIA

Symposium on “Civil-Military Cooperation and International Collaboration in Cyber Operations”

The University of North Georgia Institute for Leadership and Strategic Studies, in collaboration with the Center for Cyber Operations Education and the College of Arts and Letters, invites academics, graduate and undergraduate students, international cadets from foreign military academies, and cadets from U.S. service academies and other senior military colleges, to present papers or posters addressing this topic at the second annual UNG Security Symposium. Through this symposium, UNG and the ILSS intend to contribute to the scholarly discussion of security and strategic issues in this increasingly complex domain.

The 2017 Symposium Features:

- Speakers
- Panel Discussions
- Poster Sessions
- Presentation of Selected Papers

Wifi Sign-In Information:

username: cyber1
password: Security11!



SCHEDULE

Nov. 7 (Tuesday)

6:00 p.m. Dinner by invitation with presenters, speakers,
symposium organizing group

Nov. 8 (Wednesday)

7:45 a.m. Registration

8:30 a.m. Welcome

8:45 a.m. Speaker: Dr. Wethington - Chief of the National Security
Agency, Georgia College of Cyber
*Introduced by Dr. Bryson Payne, Director of UNG's Center for Cyber Operations
Education and Professor of Computer Science*

9:15 a.m. Discussion and Q&A

9:30 a.m. Panel Discussion:

- Building a Civil-Military Framework for Cyber Deterrence
Dr. Bryson R. Payne - University of North Georgia
Dr. Edward L. Mienie - University of North Georgia
Mr. Victor C. Parker - University of North Georgia
- Designing a Military Cyber Strategy for South Africa
Ms. Noelle van der Waag-Cowling - South African Military Academy at
Stellenbosch University

*Panel Moderator: Dr. Robin Dorff, Kennesaw State University, Dean for College
of Humanities and Social Sciences*

10:30 a.m. Discussion and Q&A

10:45 a.m. Break - Poster Sessions

11:00 a.m. Keynote Speaker: Major General Fogarty - Chief of Staff,
U.S. Cyber Command

Introduced by Dr. Bonita Jacobs, President of the University of North Georgia

11:45 a.m. Discussion and Q&A

12:00 p.m. Lunch Break - No Host (See pages 27 and 28 in
program for downtown Dahlonega map and restaurant
suggestions)

1:30 p.m. Panel Discussion:

- Cybersecurity as a Horizontal Issue in Public Service
Colonel Laszlo Kovacs, Ph.D. - National University of Public Service, Hungary
Dr. Csaba Krasznay - National University of Public Service, Hungary

SCHEDULE

- 1:30 p.m. Panel Discussion (*continued*)
- **Cyber-Resilience Strategies for Small Countries**
Dr. Bruce C. Watson - Stellenbosch University, S. Africa
Dr. Lech Jenczewski - University of Auckland, New Zealand
 - **A Taxonomy of National Challenges in Cyber Defense**
Dr. Bruce C. Watson - Stellenbosch University, S. Africa
Mr. Given Shingange - Stellenbosch University, S. Africa
- Panel Moderator: Matthew (Matt) Stern, Vice President, Cyber for Intelligent Waves, LLC.*
- 2:30 p.m. Discussion and Q & A
- 2:45 p.m. Break - Poster Sessions
- 3:00 p.m. Speaker: Leo Scanlon - Deputy Chief Information Security Officer for U.S. Department of Health and Human Services
Introduced by Dr. Conner-Kerr, Dean and Professor of the UNG College of Health Sciences and Professions
- 3:30 p.m. Discussion and Q&A
- 3:45 p.m. Break
- 4:00 p.m. Speaker: Colonel (Ret) Bill Smullen - Director of National Security Studies at Syracuse University
Introduced by Dr. Edward Mienie, UNG Executive Director, Strategic Studies & Partnerships, Associate Professor of Strategic & Security Studies
- 4:30 p.m. Discussion and Q&A
- 4:45 p.m. Break
- 6:30 p.m. Symposium Social and Poster Session at The Smith House
(see map and directions on page 29)
- 8:00 p.m. End of Day One

Nov. 9 (Thursday)

- 8:15 a.m. Registration
- 8:45 a.m. Welcome
- 9:00 a.m. Speaker: Colonel Collins - Director of Air Force CyberWorx, U.S. Air Force Academy
Introduced by Keith Antonia, UNG Associate Vice President for Military Programs
- 9:30 a.m. Discussion and Q&A
- 9:45 a.m. Break - Poster Sessions

SCHEDULE

10:00 a.m. Panel Discussion:

- Classification of Web Service-Based Attacks and Mitigation Techniques
Mr. William T. Bond - Kennesaw State University
- Hybrid Wars: The 21st-Century's New Threats to Global Peace and Security
Dr. Sascha Bachmann - Bournemouth University, United Kingdom
- Is Cyber Shape Shifting?
Dr. Bruce C. Watson - Stellenbosch University, S. Africa
Mr. Neal Kushwaha - Impendo, Inc.

Panel Moderator: Alfred S. Barker, MSIS, Assistant Vice Chancellor/CISO, Cybersecurity, Board of Regents, University System of Georgia

11:00 a.m. Discussion and Q&A

11:15 a.m. Break

11:30 a.m. Speaker: Colonel Kovacs - Director of the National University of Public Service Cybersecurity Research Team, Hungary
Introduced by Dr. Billy Wells, UNG Senior Vice President for Leadership and Global Engagement

12:00 p.m. Discussion and Q&A

12:15 p.m. Recognitions

12:30 p.m. Closing Remarks, Dr. Billy Wells, Senior Vice President for Leadership and Global Engagement

12:45 p.m. End of Conference

Symposium Social & Poster Session

The Smith House

Nov 8, 6:30 p.m - 8:00 p.m.

84 S Chestatee St.

(see page 29 for directions)

The SMITH HOUSE
Lodging • Country Store • Dining

Image Credit: J. Stephen Conn

KEYNOTE SPEAKER

Major General Stephen G. Fogarty

Chief of Staff of the U.S. Cyber Command



Major General Stephen G. Fogarty, a native of Savannah, Georgia, was commissioned as a Second Lieutenant in Military Intelligence (MI) in May 1983, after earning his Bachelor of Arts in History at North Georgia College. He also holds a Master of Science in Administration from Central Michigan University, and a Master in Strategic Studies from the U.S. Army War College.

MG Fogarty's command tours include the Long Range Surveillance Detachment, 125th MI Battalion, 25th Infantry Division (Light); the 732nd MI Battalion; the 116th MI Brigade and National Security Agency-Georgia; the U.S. Army Intelligence and Security Command; and, most recently, the U.S. Army Cyber Center of Excellence and Fort Gordon.

His Joint and Combined assignments include Chief, Integrated Survey Program, for the United States Special Operations Command; Director, Joint Intelligence Operations Center, Afghanistan; Director of Intelligence, J-2, United States Central Command; and Deputy Chief of Staff, Intelligence, CJ-2, for NATO's International Security Assistance Force, Afghanistan. During his Joint and Combined assignments, he deployed to Afghanistan three times in support of OPERATION ENDURING FREEDOM. His earlier assignments included command and staff positions in general purpose as well as special operations forces.

His awards and decorations include the Distinguished Service Medal (2 awards), Defense Superior Service Medal (3 awards), Legion of Merit, Bronze Star Medal (2 awards), Defense Meritorious Service Medal, Meritorious Service Medal (5 awards), Joint Service Commendation Medal, Army Commendation Medal (2 awards), Master Parachutist Badge (w/bronze star), Air Assault Badge, and the Ranger Tab.

Major General Fogarty has been married for the past 34 years to the former Sharon Zelasky of Atlanta, Georgia.

SPEAKERS

Colonel Jeffrey Collins, Ph.D.

Director of Air Force CyberWorx



Colonel Jeffrey A. Collins directs Air Force CyberWorx, a new venture comprising a public-private design center at the Air Force Academy focused on cyber capabilities and melding military, academic, and industry expertise with state of the art technology and design thinking to solve operational problems. Before his assignment to CyberWorx, Colonel Collins was the Deputy Director for Air Force Cyberspace Strategy and Policy at the Pentagon and also served as the Director of Staff for the Air Force Chief of Information

Dominance and Chief Information Officer.

Colonel Collins is the former Research & Technology Director of the Air Force Command and Control (C2) Battlelab and commanded the 766th and 966th Air Expeditionary Squadrons in Afghanistan. He also previously commanded the 19th Services Squadron, Little Rock Air Force Base, Arkansas, where he executed all programs promoting unit cohesion, individual and family resiliency, physical fitness, and the quality of life for 5,200 military and civilians and 49,000 retirees.

Colonel Collins was commissioned through the Air Force Reserve Officer Training Corps at Purdue University. He earned graduate and management degrees from Rensselaer Polytechnic, Troy University, and his Ph.D. from Carnegie Mellon University in Pittsburgh. He most recently completed the CIO certificate program at the National Defense University, Washington, D.C. He was honored as the Air Force Field Grade Officer of the Year in 2005 by the Air Force's Warfighter Integration and Chief Information Officer and won the United States Air Forces in Europe's Leo Marquez Award for outstanding communications-electronics maintenance in 2004.

SPEAKERS

Colonel Laszlo Kovacs, Ph.D.

Professor at the National University of Public Service



Colonel Laszlo Kovacs is a professor at the National University of Public Service (NUPS). He graduated from the Military Technical College as an electronic warfare officer in the Hungarian Army in 1991. During his military career, he served in various positions in different electronic warfare units. He earned his master's degree at NUPS in Budapest in 1999, and his Ph.D. in the field of military technical science in 2004. He has been working in military higher education since 2002.

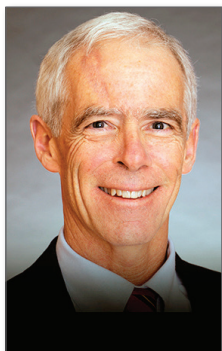
Colonel Kovacs is a full-time professor in the Department of Electronic Warfare at NUPS, Hungary. He engages in scientific research in cyber warfare, cyber terrorism, information warfare, and critical information infrastructure protection. He won the Research Scholarship for the Hungarian Academy of Sciences with cyber terrorism research themes in 2005 and 2009. He leads Ph.D. students as a scientific adviser in the fields aforementioned. He also serves as the head of the NUPS Cybersecurity Research Team.



SPEAKERS

Leo Scanlon

Deputy Chief Information Security Officer



Leo Scanlon is the HHS Senior Advisor for Healthcare and Public Health (HPH) Sector Cybersecurity and the Deputy Chief Information Security Officer for the Department of Health and Human Services. He serves as chairman of the HHS Cyber Security Working Group, which coordinates cybersecurity collaboration between HHS Operating Divisions and their partners in the private sector. He is the executive sponsor of the HHS Healthcare Cybersecurity Communications and Integration Center

(HCCIC). The HCCIC supports cyber threat and indicator sharing across HHS Operating Divisions, DoD and civilian agency partners, and healthcare cybersecurity stakeholders in the intelligence and law enforcement communities, and the National Health Information Sharing and Analysis Center (NHISAC).

Leo has worked at the interagency level as a co-chair of the Identity Credential and Access Management sub-committee of the Information Security and Identify Management Committee (ISIMC), and as a tri-chair of the ISIMC. He is co-chair of the Government Advisory Council of the International Information System Security Certification Consortium (ISC2), and government chair of the ACT-IACT Cybersecurity Community of Interest.

Prior to joining HHS, Leo served as the CISO for the National Archives and Records Administration (NARA) from 2005 to 2015. While at NARA, he put in place and matured the agency IT Security Program and the Insider Threat program. He came to federal service from the private sector where he developed cybersecurity programs as a federal contractor and in the telecommunications industry.

SPEAKERS

Colonel (Ret) Bill Smullen

Director of National Security Studies at the Maxwell
School of Citizenship and Public Affairs



Bill Smullen was appointed as the Director of National Security Studies at the Maxwell School of Citizenship and Public Affairs in June of 2003. He is also Maxwell's Senior Fellow in National Security and a member of the faculty of Syracuse University's S.I. Newhouse School of Public Communications as a Professor of Public Relations.

Prior to his appointment at Syracuse University, he was the Chief of Staff to Secretary of State Colin L. Powell and of the U.S. Department of State beginning in January 2001. As principal advisor to the Secretary, he was responsible for monitoring and evaluating the formulation and implementation of departmental policies. He was also involved in the planning and development of concept strategy associated with foreign policy matters.

A professional soldier for 30 years, he retired from the U.S. Army in 1993. His military career included a series of infantry and command and staff assignments at the platoon, company, battalion, brigade and division levels, as well as several public affairs positions including Media Relations Officer at West Point and Chief of Media Relations for the Department of the Army. Overseas Army tours took him to Korea, Panama and twice to Vietnam. His military schooling included the Army's Command and General Staff College and the Army War College. His military citations include the Defense Superior Service Medal, the Legion of Merit, the Bronze Star Medal, the Army Meritorious Service Medal, the Air Medal, the Combat Infantryman's Badge and the Parachutist's Badge.

His last assignment on active duty was Special Assistant to the eleventh and twelfth Chairmen of the Joint Chiefs of Staff, Admiral William J. Crowe, Jr., and General Colin L. Powell. Upon leaving active duty, he became the Executive Assistant to General

SPEAKERS

Powell, assisting with the writing and promotion of his best-selling autobiography, “My American Journey,” published in 1995. From 1993 to 2001 he had daily responsibility for managing the General’s private office and professional activities. Beginning in 1997 he doubled his responsibilities by becoming the Chief of Staff for America’s Promise—The Alliance for Youth, which General Powell chaired from May 1997 to January 2001.

Among his career accomplishments, he has been elected to Syracuse University’s S.I. Newhouse School of Public Communications Hall of Fame, the U.S. Army Public Affairs Hall of Fame, the University of Maine ROTC Hall of Fame, and was chosen as the recipient of the University of Maine 2007 Alumni Career Award, which is the highest honor presented by the University of Maine Alumni Association. He received the 2007 Public Relations Society of America’s Lloyd B. Dennis Distinguished Leadership Award.

He earned a Bachelor of Arts Degree in Business and Economics from the University of Maine in 1962 and a Master of Arts Degree in Public Relations from the S.I. Newhouse School of Public Communications at Syracuse University in 1974.

An accomplished speaker, he appears before audiences nationwide on subjects of contemporary and topical interest. Featured topics includes those from his book, *Ways and Means for Managing Up*, which was published in 2014 by McGraw-Hill. In addition, he has written two more books: *There’ll Never Be Another Beauregard* published in 2014 and *Prime Time Primer* published in 2016.

Janice Wethington, Ph.D.

Chief, National Security Agency - Georgia
College of Cyber

Dr. Wethington holds a Ph.D. in mathematics from the University of Georgia and has been working for the Department of Defense since 2005. Her current occupational responsibilities are in cyber-related education and training for intelligence community personnel.

PRESENTERS

Dr. Sascha D. Bachmann, LL.M LL.D

Associate Professor, Bournemouth University



As a British-German academic, I joined the Bournemouth University as an Associate Professor in International Law in August 2013. Prior to joining Bournemouth I worked as a Senior Lecturer in International and European Law at the University of Portsmouth and as a Reader in International Law at the University of Lincoln. I have been a member of the SLS since 2008.

In 2016 I was made an Extraordinary Visiting Professor (AP) in War Studies in the Department of Military Studies at the Swedish Defence University, Stockholm in recognition of my academic contributions to Military studies.

My teaching and research focus is on international legal subjects and work on research projects involves colleagues from the UK, South Africa, Israel, Sweden, the USA, and Australia.

I was educated in Germany [Ludwig-Maximilians-Universität (LMU) München], South Africa (Stellenbosch University and University of Johannesburg) and the United Kingdom (University of Portsmouth). Prior to completing a LL.M at Stellenbosch University, I was admitted as a German Rechtsanwalt (attorney at law) at the High Court of Munich.

My research (more than 40 outputs) is often interdisciplinary and shows a clear nexus to new Security Challenges in the 21st Century: be it Hybrid Warfare, Bankrupting Terrorism, on Hybrid Warfare, Information Operations, or Russia's use of Lawfare within its legal, military, and historical context.

Since October 2012, I published over 18 academic pieces on the subject of Hybrid War and Conflict, some of which were published in leading international journals. I presented on Hybrid War at NATO in April 2016, at the Austrian Ministry of Defence in November 2015, at the Swedish Defence University in April 2016, the South African National Defence Force, the Faculty of Military Science of Stellenbosch University, and the Royal Danish Defence College.

I am a former army officer (Lieutenant Colonel - German Army Reserve) with operational experience and career professional in law

PRESENTERS

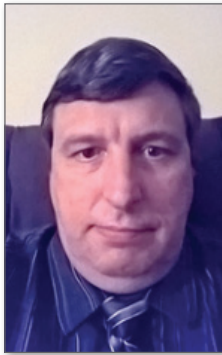
and higher education. In the last 20 years I have worked in various capacities and functions in the USA, the Middle East, South Africa and various European countries. I was seconded to the 23rd US MAR Rgt as a visiting exchange officer in 2006.

I co-authored two submissions of evidence to the UK Parliament's Defence Committee on Hybrid Warfare and Russia's Arctic ambitions which were published in 2016 and 2017. I also presented to the Austrian MoD and had a piece published in its Annual Security Assessment.

I am a regular contributor to NATO's Legal Advisor Web (LAWFAS) with my publications being used as NATO reference documents (Legal Advisors Worktop Functional Area System (LAWFAS) by The Supreme Headquarters Allied Powers Europe (SHAPE).

William Bond

MSIT Graduate Student, Kennesaw State University



William Bond, MSIT Graduate Student, Department of Information Technology, College of Computing and Software Engineering, Kennesaw State University. He will be receiving his Master of Science Information Technology from Kennesaw State University in the Fall of 2017. He received his Bachelor of Applied Science in Information Technology from Kennesaw State University in 2016. He received an Associates of Applied Science Degree in Network Specialist from North Georgia Technical College in Clarkesville, Georgia in 2012. His research interests include Web Services vulnerabilities and mitigations, Information Security and Data Analytics. He served in the United States Army as a Field Artilleryman and as a Non-Commissioned Officer. He is a member the Upsilon Pi Epsilon International Honor Society for the Computing and Information Disciplines.

PRESENTERS

Noëlle van der Waag-Cowling

Chair, School for Geospatial Studies and Information Systems, Faculty of Military Science, Stellenbosch University



Noëlle van der Waag-Cowling is a military science professional with 25 years of experience in the Department of Defence, South Africa and 20 years of experience in South African Higher Education at Stellenbosch University. She is the co-ordinator of the Cyber Project at the Security Institute for Governance and Leadership in Africa. She has served as assistant editor of the journal *Scientia Militaria*, published in various national and international scientific publications, and been a participant in international military education projects.

Noëlle teaches fifth dimension warfare and low intensity conflict in the Department of Military Strategy, Stellenbosch University.

Lech Jenczewski

Associate Professor, Department of Information Science and Operations Management, University of Auckland

Dr. Jenczewski has over forty years' experience in information technology. He was the managing director of the largest IBM installation in Poland, and project manager of the first computing centre in the Niger State of Nigeria. He is Associate Professor at the University of Auckland, Department of Information Science and Operations Management. His area of research includes data security management with the special emphasis on cyber terrorism. Dr. Jenczewski wrote above 300 publications presented in scientific journals, conference proceedings, and books. His last book, *Cyber Conflicts and Small States*, was published in January 2016 by Ashgate Publishing (United Kingdom). He is the chairperson of the New Zealand Information Security Forum, secretary of the IFIP TC-11 committee (Security and Privacy Protection in Information Processing Systems), and the Fellow of the Institute of IT Professionals (former New Zealand Computer Society).

PRESENTERS

Csaba Krasznay, Ph.D.

Assistant Professor and Director of Cybersecurity Academy, National University of Public Service



Dr. Csaba Krasznay, Ph.D., is an Assistant Professor and conducts research on cybersecurity at the National University of Public Service, Hungary. He leads the Cybersecurity Academy at NUPS as a Program Director. He is a member of the board at the Hungarian E-government Association and Voluntary Cyberdefence Coalition. He received his MSc in 2003 in Electrical Engineering at Budapest University of Technology and Economics, and his Ph.D. at NUPS. He was elected to the “Most Influential

IT Security Expert of the Year 2011.” He is also employed by Balabit where he acts as a Security Evangelist. He is responsible for the vision and strategy of Balabit’s Privileged Access Management solutions.

Neal Kushwaha

Founder and CEO, Impendo Inc.



Mr. Neal Kushwaha’s background focuses on the IT security, physical security, IT infrastructure, and physical data center design for classified spaces. With over 21 years of experience in the domain, he has helped private and public sector organizations make their data centers and systems work for them. He has successfully moved 30 data centers covering 3 continents. Annually, he hosts a conference on cyber and data centers in Ottawa, Canada known as DCAR.

When he is not working at Impendo Inc., he is busy training to climb his next big mountain. Neal is an accomplished mountaineer and was the lead of a spring 2014 Lhotse/

PRESENTERS

Everest ascent team. As habituated as he is with the ever-strenuous responsibility for the lives of an international ascent team, seeing his shadow in the clouds and watching the sun crest over the curvature of the earth are sights that will most likely never tire him.

Edward L. Mienie, Ph.D.

UNG Executive Director, Strategic Studies & Partnerships,
Associate Professor of Strategic & Security Studies



Mienie has more than 15 years of experience working in international relations and business, media relations, and coalition building. He earned a bachelor's degree in law from the University of South Africa and received his doctorate in international conflict management while teaching and leading the academic exchange program with South Africa at Kennesaw State University.

Academics: BA (Law), University of South Africa, 1984; Ph.D. International Conflict Management, Kennesaw State University, 2014; International Relations, Trade, Finance, Media, and Law Courses, School of Diplomacy in South Africa, 1987-1989; Courses in Conflict Resolution and Negotiation, World Trade Organization, Geneva, Switzerland, 1996; SAP & ASAP Certification (Walldorf, Germany), Enterprise Resource Planning, 1998; Leadership Training, South African Infantry, 1978-1979. Professional Experience: Executive Director Strategic & Security Studies Program & External Relations, UNG, 2017; Associate Vice President Executive Affairs, UNG, 2015-17; Executive Advisor, Applied Software Technology, 2002-2015; SAP Software Consultant, 1999-2010; Diplomat, South Africa, 1987-1998; Deputy-Ambassador to Switzerland, 1994-1998; Political Advisor, Minister of Foreign Affairs, South Africa, 1992-1994; Political Advisor to Ambassador and US Government/ Congressional Liaison, Washington, D.C., 1989-1992; Active Military Conscript (Angolan War), Infantry, 1979-1983. Research Interests: State Fragility; Role of Public Diplomacy in Conflict Management; Counter-Terrorism; Nuclear Non-Proliferation.

PRESENTERS

Victor C. Parker

Associate Professor, UNG Mike Cottrell College of Business



Victor Parker has taught at the University of North Georgia since 2001. He enjoys serving and working with the students at UNG. He has served with as an Advisor for The Student Government Association for nearly ten years. He has been a strong mentor for many students and has won several academic advising and teaching awards. With a doctorate in law and an M.B.A., one current research interest involves the intersection of law, computer science, and technology. He currently lives in the North Georgia Mountains with his wife,

three children, two dogs, three cats, and two rabbits.

Bryson R. Payne, Ph.D.

Director of UNG Center for Cyber Operations Education
and Professor of Computer Science



Dr. Bryson Payne is the founding Director of the Center for Cyber Operations Education at the University of North Georgia, an NSA Center for Academic Excellence in Cyber Defense. He is also a tenured professor of computer science at UNG, where he has taught aspiring cyber professionals since 1998. He is a Certified Information Systems Security Professional (CISSP®) and Certified Ethical Hacker (CEH), among other industry certifications. He was also the first Department Head of Computer Science at

UNG and enjoys working with K-12 schools worldwide to promote computer science education.

Featured in *CIO* magazine, *Campus Technology*, and the *Wall Street Journal*, Dr. Payne is the best-selling author of *Teach Your Kids*

PRESENTERS

to Code: A Parent-Friendly Guide to Python Programming (2015, No Starch Press), now published in five languages (Korean, Portuguese, Russian, Chinese, and English). His new book, *Learn Java the Easy Way* (2017, No Starch Press) hit the shelves this fall, and he's a popular online instructor with over 20,000 students enrolled from more than 150 countries, including the highly-rated Udemy course *Real-World Ethical Hacking* (2017). He holds a Ph.D. in computer science from Georgia State University and has published articles in scholarly and trade journals, in addition to speaking regularly at regional and national conferences on computer science and cybersecurity education.

Given Shingange, Ph.D.

Director, Connecting the Dots Training and Consulting Services



Shingange is Director of Connecting The Dots Training and Consulting Services. He is also the founder of a nonprofit company that deals with career and organizational development, as well as the 2IC of Regiment President Steyn a reserve force unit in Bloemfontein, South Africa.

Shingange is a former permanent force member of the South African National Defence Force (currently serving as a Reserve Force member) and a graduate of the South African Military Academy. He is currently studying towards an MPhil in Knowledge and Information Systems Management at Stellenbosch University.

Shingange has worked in different industries, occupying various senior positions. He has worked in the private security sector, construction, waste management, training, and the hospitality sector. He has also provided consulting services to different organizations in the public and the private sector. He is currently working on developing Mobile Apps and on the development of ICT security platforms.

PRESENTERS

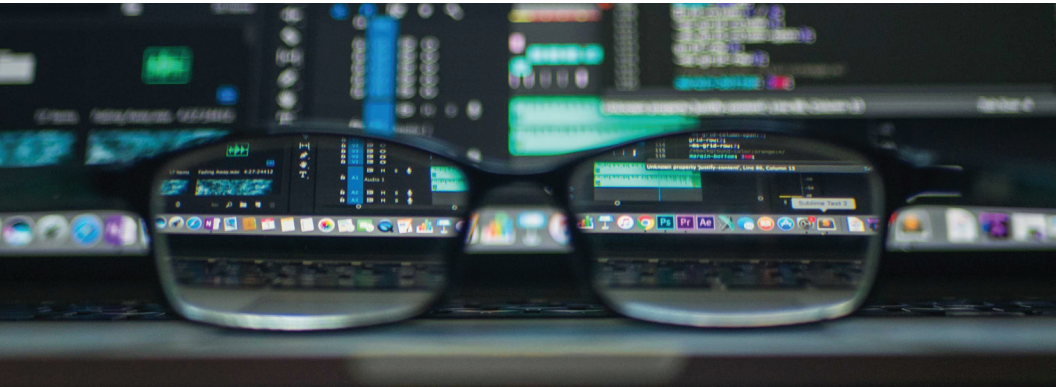
Bruce W. Watson, D.Eng, Ph.D.

Chief Scientist at IP Blox; Professor, Centre for AI Research, Stellenbosch University; Visiting Professor, Computer Science, King's College London



Bruce Watson is chief scientist at IP Blox—a developer of leading edge technologies for deep-packet inspection, with a focus on performance and virtualization. Academically, he is co-founder and co-director of the distributed FASTAR Research Group, director of the Centre for Decision Making and Knowledge Dynamics, and co-director of the Centre for Artificial Intelligence Research. Bruce holds a professorship at Stellenbosch University and a visiting professorship in the Department of Computer Science at King's College London. With more than a dozen researchers, his FASTAR Research Group performs fundamental research in new algorithms and implementations for high performance pattern matching.

Watson's first doctorate is in computing science and engineering from Eindhoven University of Technology, after studying discrete mathematics and computer science at the University of Waterloo. He later returned to Eindhoven as chair of Software Construction. Watson's second doctorate, in computer science, is from the University of Pretoria in 2012.



MODERATORS

Alfred S. Barker, MSIS

Assistant Vice Chancellor/CISO, Cybersecurity, Board of Regents, University System of Georgia



Alfred Barker had a long distinguished military and higher education career before joining the University System of Georgia, Information Technology Services (USG/ITS) in November 2015. A former Marine, Alfred has 17 years of experience designing, planning, directing, and coordinating activities in cybersecurity for higher education. He came to USG/ITS from the University of North Georgia where he was a principle member of their strategic leadership team. Alfred develops and manages cybersecurity

governance, policies and procedures necessary to reduce or mitigate the loss of the confidentiality, integrity and availability of the information, and information system assets for the University System of Georgia.

Alfred is a member of the CISO Executive Network, InfraGard, INTERFACE-Atlanta, SANS.EDU, and University System of Georgia's CIO Security Advisory Group and Project Management Group. Alfred has a Master of Science in information security with academic honors from Lewis University and is a graduate of the EDUCAUSE Leadership Program and a member of EDUCAUSE HEISC. He also is a GIAC Information Security Professional, certified forensic examiner, and holds over 20 professional and technical certifications.

Alfred provides cybersecurity leadership to the University System of Georgia, which is composed of 28 higher education institutions made up of 47,000 faculty/staff and over 329,000 students. The institutions include research universities, comprehensive universities, state universities, and state colleges. In addition, the Georgia Public Library System, encompassing approximately 389 facilities in 61 library systems throughout Georgia, is also part of the University System. Finally, the University System includes the Georgia Archives, which identifies, collects, manages, preserves, publicizes, and provides access to records and information of Georgia and its people.

MODERATORS

Robin Dorff, Ph.D.

Dean, College of Humanities and Social Sciences, and
Professor of Political Science at Kennesaw State University



Dr. Dorff is Dean of the College of Humanities and Social Sciences (CHSS) and Professor in the Department of Political Science & International Affairs. He joined KSU as Dean of CHSS in July 2012 from the Strategic Studies Institute at the U.S. Army War College where he was Research Professor of National Security Affairs (2007-2012) and also held the General Douglas MacArthur Chair of Research since 2009. After completing his M.A. and Ph. D. at the University of North Carolina-Chapel Hill, Dr.

Dorff held faculty positions at Michigan State University and North Carolina State University. He has served on the USAWC faculty as a Visiting Professor (1994-96) and as Professor of National Security Policy and Strategy in the Department of National Security and Strategy (1997-2004), where he also held the General Maxwell D. Taylor Chair (1999-2002) and served as Department Chair (2001-2004). Dr. Dorff has been a Senior Advisor with Creative Associates International, Inc., in Washington, DC, and served as Executive Director of the Institute of Political Leadership in Raleigh, NC (2004-2006). Dr. Dorff remains extensively involved in strategic leadership development, focusing on national security strategy and policy, and strategy formulation. His research interests include these topics as well as failing and fragile states, interagency processes and policy formulation, stabilization and reconstruction operations, and US grand strategy. He has published and lectured frequently on these topics and has spoken all over the U.S. and in Canada, Europe, Africa, and Asia. Dr. Dorff is the recipient of the U.S. Army Superior Civilian Service Award, the U.S. Army Outstanding Civilian Service Medal, and the U.S. Secretary of State Distinguished Public Service Award.

MODERATORS

Matthew Stern

Vice President, Cyber for Intelligent Waves, LLC.



Matthew (Matt) Stern is the Vice President, Cyber for Intelligent Waves, LLC and provides cyber operations subject matter expertise support to a variety of organizations and customers. Highlights from his civilian experience include leading the contract team for the United States Computer Emergency Readiness Team (US-CERT) and the National Cyber Protection System. In this role, he was responsible for managing and leading all aspects of program execution relating to the operational, analytical, and engineering

support to these programs. Matt is a retired combat veteran serving 22 years in the U.S. Army. His service culminated with command of 2nd Battalion, 1st Information Operations Command, the Army Computer Emergency Response Team (ACERT), and Regional Computer Emergency Response Teams (RCERTs). This was one of the first units in U.S. Army history dedicated to cyberspace operations. Matt gained unparalleled knowledge and expertise through practical experience leading a variety of organizations providing U.S. military data communication and cybersecurity services worldwide. Matt is also a decorated veteran of Operations Desert Shield/Storm and Iraqi Freedom. Matt is an established expert on cyber threat analysis and practical approaches to defending cyber infrastructure. Matt holds a master's degree in Information Systems and Computer Resource Management from Webster University and a bachelor's degree in Political Science from Northern Illinois University.

POSTER PRESENTERS

Cadet Roger Causey

I am Cadet Roger Causey from the Virginia Military Institute, located in Lexington, VA, and I am here to present the “VMI Cyber Club.” I grew up in Chesterfield County, outside of Richmond, VA. I am currently the Cadet First Sergeant of F Company, a member of the Cyber Club at VMI, Assistant Cadet in Charge of the Wrestling Club, and an Army ROTC Cadet. I got into Networking when I was 15 creating a game server for my friends and me to play on. I thought this was really fascinating and soon after enrolled in the Cisco Networking Academy. There I learned how to create home and enterprise networks alongside learning exploits on these networks. I have been furthering my education as a CIS Major at VMI and participating in Internships through the U.S. Army.

Cadet Vinícius Chitolina

Fourth-year Cadet graduating in Military Sciences with emphasis in Signal Corps in Agulhas Negras Military Academy – Resende – Rio de Janeiro – Brazil.

Delia-Bianca Deaconescu

My name is Delia-Bianca Deaconescu. I am a student in the “Nicolae Bălcescu” Land Forces Academy Sibiu of Romania. I have one more year to study until I graduate and then I will have practice in my field. My military branche is Signals and I am interested in communications. I came from Râmnicu Vâlcea city but now I stay in Sibiu.

I am honored because I study in this academy; it was a pleasure to meet new friends and learn a lot of new things. My life has changed enormously since I entered into military life but I am glad to be here. I have some hobbies like sports, music, photography, and walks.

I am so delighted because I have the opportunity to travel in America and I cannot wait to meet new friends, to visit beautiful places, and also to participate at this tremendous symposium.

POSTER PRESENTERS

Cadet Iuri Khijakadze

I am Iuri Khijakadze, a junker at the National Defence Academy of Georgia. I was born in Russia on the 21st of December, 1995. I grew up and live in Kutaisi, Georgia.

Before joining the NDA, I finished high school (2011) and the Cadets Military Lyceum (2014). I have been awarded for exceptional academic performance as well as for sports achievement (boxing).

My interest in IT and cyber issues has driven me to increase my knowledge in those fields. I follow a goal of constant learning and development in order to become a successful officer in service of the homeland.

I am married and I have a little daughter.

Lieutenant Federico Lagrasta

Born in Terracina, Italy, on June the 1st, 1995, he approached the military life in the Italian Air Force High School (Scuola Militare Aeronautica) Giulio Douhet, scientific department, in Florence on September 2011. After three years he joined the Army Military Academy (Accademia Militare) in Modena on August 2014 where he graduated 2nd Lieutenant of the Army Signal Corps, on September 2016.

For the time being he is attending the Army Institute for Applied Military Studies (Scuola di Applicazione) in Turin, second year, where he studies Strategic Sciences. He has been studying IT security for years and, as a Signal Corps officer, he is deeply interested in cyber operations from a military point of view.

He spends most his free time self developing technical skills that can be used also in his profession. With this aim he participates at numerous conferences and meetings. On the 26th of August 2017 he successfully passed the Offensive Security Certified Professional exam after an exhausting 48-hour-long session and obtained his OSCP certification.

POSTER PRESENTERS

Jacob C. Malimban

Jacob Malimban is a third semester student at the University of North Georgia in pursuit of a Bachelor's of Science in Computer Science and a Cyber Security minor. During his senior year of high school, he found enjoyment as an IT intern for the school as well as learning to program with Java in his AP Computer Science class. From there, he was accepted into UNG and drives to the Dahlonega campus. Presently, he is the Honors Program Historian and the Olympic Pistol Treasurer, as well as an active member of UNG's Programming and Cyberhawks (Cyber Security) team.

Cadet Marek Olšan

My name is Marek Olšan. I am from the Czech Republic. I am 26 years old. I was born on 14. 10. 1991 in Polička. I live in a small village called Banín with my mom and my grandma. It is about 60 km north of Brno. I went to elementary school in Rohozná, which is a small village 6 km away from Banín. Then I went to Grammar school in Jevíčko. Now I study at the University of Defense in Brno. My field of study is communication and information systems. Now I am in the master's degree program, which is divided into communication part and information part. I chose the information specialization. After university, I would like to work in National Cyber and Information Security Agency.

Bradford T. Regeski

My name is Brad Regeski, and I'm currently a third-year student at the University of North Georgia, where I am presently pursuing a Bachelor's of Science in Computer Science with a Cyber-Security minor. I discovered my passion for coding my senior year at Lassiter High School, where I participated in the local programming team

POSTER PRESENTERS

and started coding artificial intelligence for the local robotics club. I attended the University of North Georgia eager to pursue software development but recognized the growing concern regarding the security aspect of the emerging inter-connected world. Currently I am participating in the Cyber-Hawks Cyber-Security Organization, UNG Coding Team and the UNG Rock Climbing Club. In my off time I am an avid Raspberry Pi enthusiast, rock climber, and volunteer web developer for the local community of Dahlonega.

Cadet Shintaro Shiga

School: National Defense Academy (NDA) Yokosuka, Japan

Field of study: Department of Humanities, which mainly focuses on foreign languages, psychology, history, geography, anthology, and philosophy.

Shintaro Shiga, 21 years old this September, was born and raised in Tokyo. He entered NDA in 2014. In his second year in NDA, he has achieved the best cadets prize in the department. In the last International Cadets Conference at NDA, he served as a panelist as well as a presenter. He has been practicing Kendo since 4 years old and qualified as the second grade both in Kendo and Iaido. Shintaro loves traveling and reading.

Lieutenant Andrew J. Tye

LT Andrew J. Tye grew up in Moncks Corner, South Carolina where he attended Berkeley High School. He spent most of his time participating in multiple sports, including cross country, track, soccer, and earning his pilots license.

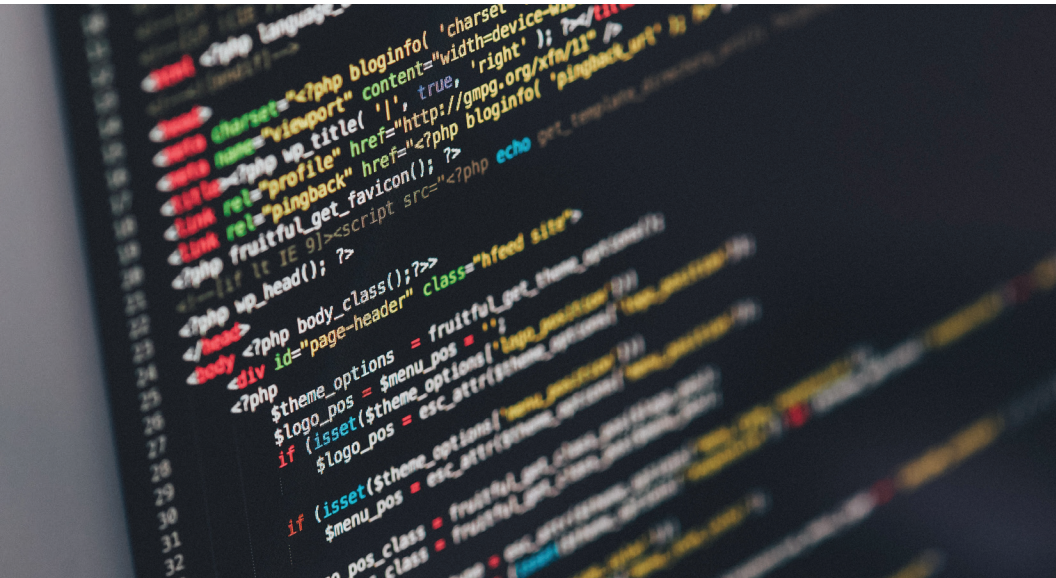
LT Tye attended The Citadel and graduated with a degree in Computer Science in May 2011. While at school he became a Bond Volunteer and Company Honor Representative. After commissioning LT Tye reported to USS GARY (FFG 51) while the ship was on a counter-narcotics deployment in 4th Fleet and homeported out of San Diego. While serving as the Electrical Officer he also served as the MWR officer, Electrical Safety Officer, EOSS Manager, Flying

POSTER PRESENTERS

Squad, and Repair 5 Locker Officer. He earned his EOOW and stood the watch while on his second deployment and certification cycle. While onboard the USS GARY, LT Tye led electrical division through multiple inspections culminating with INSURV where the division scored green in every assessment area.

In January 2014, LT Tye reported to the USS DONALD COOK (DDG 75) just weeks prior to the ship's homeport shift to Rota, Spain. He became the ship's FPO/ATO and VBSS Program Manager pioneering processes for deployed ships and certifications for all future FDNF-E ships and C6F as a whole. LT Tye organized multiple international exercises with our European partners to include Israel, Turkey, Romania, and Ukraine. LT Tye also acted as air warfare coordinator while in the Black Sea, and Ballistic Missile Defense Officer for the President's Phased Missile Defense of Europe.

Professionally, LT Tye was selected for the Navy's Graduate Education Voucher (GEV) program and is working toward his master's in Computer Science with a focus in Cyber Security while conducting research on insider threat detection in networks and internet of things (IoT) with Dr. Shankar Banik. LT Tye was selected to pilot the NROTC cyberwarfare instruction program and is a volunteer technical advisor for the Air Force CyberPatriot program for high school students.



CALL FOR PAPERS

International Journal of Security Studies

a graduate and undergraduate student research journal

Institute of Leadership and Strategic Studies | published by the UNG Press

The Institute for Leadership and Strategic Studies at the University of North Georgia and the University of North Georgia Press are accepting submissions for the inaugural issue of the *International Journal of Security Studies: a graduate and undergraduate research journal*.

About

IJoSS is an open access, online/print-on-demand, and peer-reviewed journal on Security Studies. IJoSS will present national and international perspectives on security issues and studies. By disseminating undergraduate and graduate research internationally, IJoSS seeks to facilitate students' acquisition of knowledge from alternative viewpoints, allowing them to further develop critical thinking and problem-solving competencies required to lead in a complex world.

Topics of Interest

IJoSS is open to all aspects of Security Studies. Topics of interest include, but are not limited to, the following:

- Civil-military relations
- Conflict and peacebuilding
- Economic and energy security
- Environmental and food security
- Epidemics and national and international security
- Human and everyday security
- Leadership and crisis leadership
- Strategy and warfare
- Technology and weapons security

How to Submit

Please visit the IJoSS webpage for details on how to submit:

<http://digitalcommons.northgeorgia.edu/ijoss/>

LUNCH IN DAHLONEGA

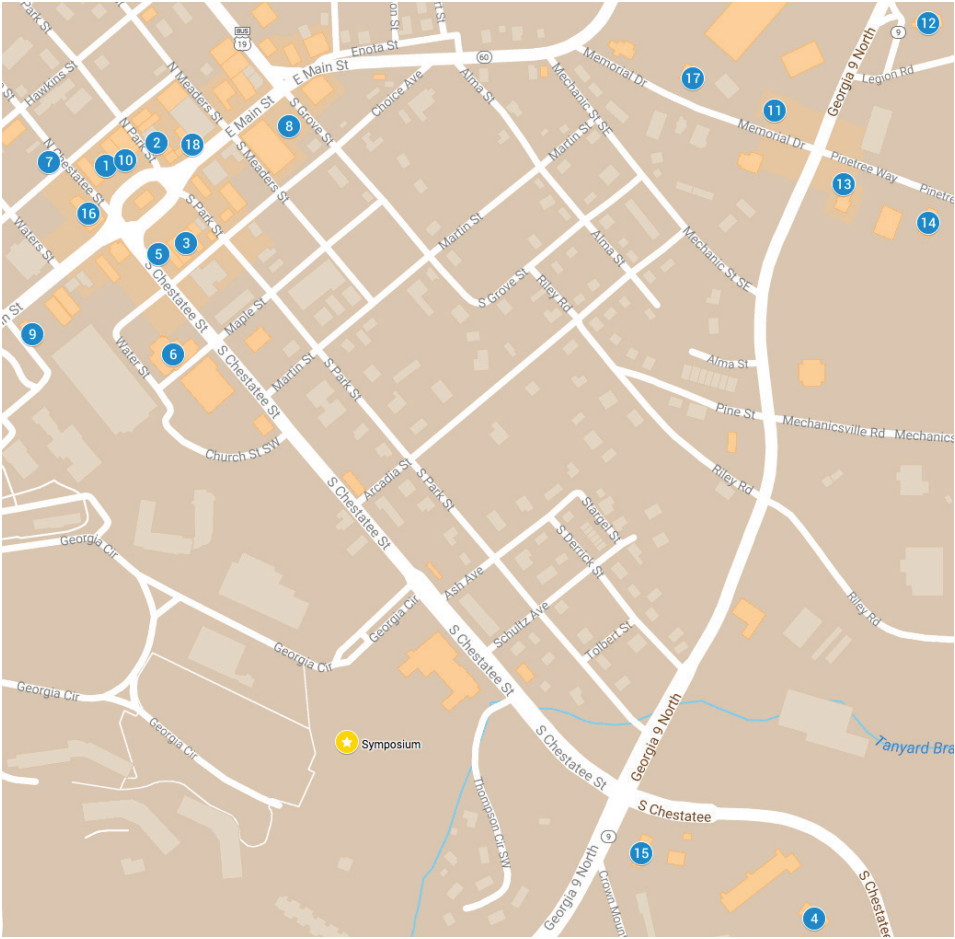
Dahlonega offers a diverse range of restaurants. There is something for everyone! Below we have provided a list of restaurants you may visit for lunch while enjoying the symposium. Please see the map on the next page for location information.

Restaurants Open for Lunch

1. Bourbon Street Grille \$\$
2. The Crimson Moon \$\$
3. Picnic Cafe and Dessertery \$
4. McDonald's \$
5. Gustavo's \$
6. The Smith House \$\$\$
7. Shenanigans \$\$
8. Pueblos Mexican Cuisine \$\$
9. El Jimador Mexican Restaurant \$
10. Capers on the Square \$\$
11. Captain D's \$
12. Chick-Fil-A \$
13. Zaxby's \$
14. Wendy's \$
15. Moe's Southwest Grill \$
16. Back Porch Oyster Bar \$\$\$
17. Bratzeit \$\$
18. Spirits Tavern \$\$

MAPS

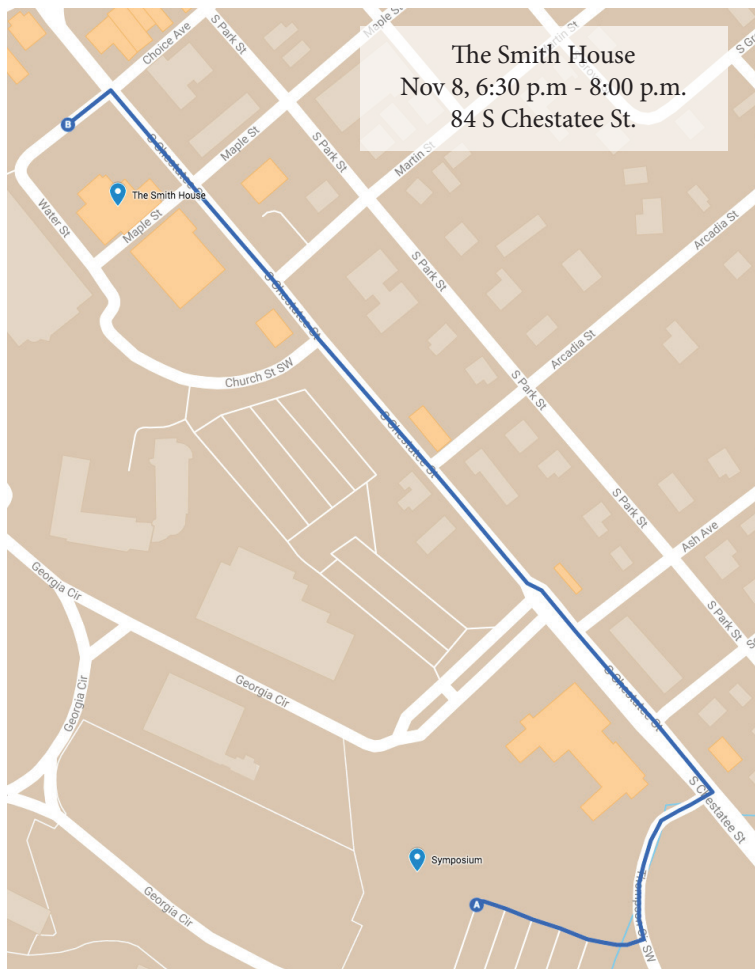
Local Restaurants



Maps created using Google My Maps.

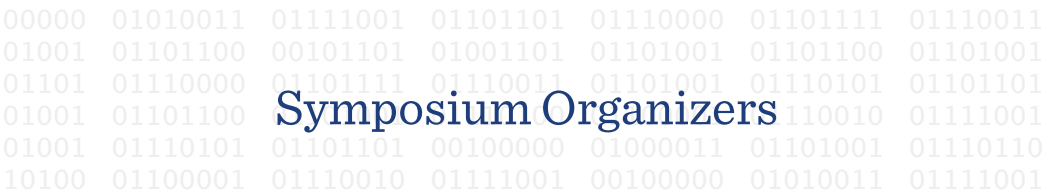
©2017 Google

Map to Symposium Social



Directions from Symposium to The Smith House

- Turn left onto Thompson Cir SW.
- Turn LEFT onto S. Chestatee St.
- Turn LEFT onto Choice Ave.
- Destination on the LEFT.



Symposium Organizers

Institute for Leadership and Strategic Studies

About ILSS

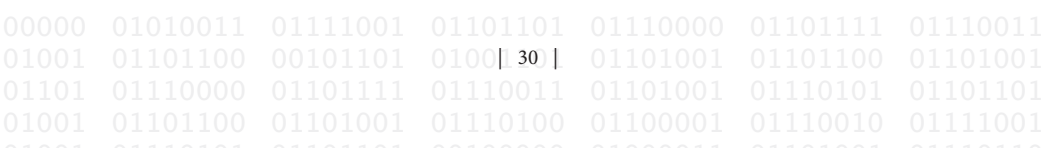
We are educating agile, adaptive, and innovative leaders of character who are able to win in a complex world.

We continuously assess the leadership education and competencies required for our Cadet graduates in demand by the U.S. Army, federal agencies, and multinational corporations. We then facilitate or develop the educational programs for Cadets that serve to satisfy those needs. These programs are available to Cadets as well as other undergraduate students at the University of North Georgia (UNG).

Center for Cyber Operations Education

About CCOE

The University of North Georgia (UNG) develops students into leaders for a diverse and global society. In support of that mission, the president has established the Center for Cyber Operations Education at UNG to prepare students for military and civilian careers in cybersecurity, cyber operations, and cyber defense. UNG is designated by the NSA and Department of Homeland Security as a National Center of Academic Excellence in Cyber Defense Education (CAE-CDE). UNG is also designated as a University System of Georgia leadership institution and is The Military College of Georgia, one of six federally designated Senior Military Colleges in the nation.



Symposium Organizers

College of Arts & Letters

About The College of Arts & Letters

The College of Arts & Letters, with twelve academic departments plus the Department of Military Science, the college is the institution's largest and most academically diverse, providing two-thirds of the core curriculum of the university. Whether it's Communication, Media & Journalism, or Visual Arts, or something in between, there's something exciting and challenging for every student to experience, explore, and engage within Arts & Letters.

Arts & Letters promotes internationalization not only within its curriculum but also by conducting study abroad academic programs and overseas opportunities in Eastern and Western Europe, Asia, Africa, and South America. Additionally, Arts & Letters faculty have been at the forefront of engaging students in research opportunities from the very first semester they set foot on one of our five campuses.

University of North Georgia

About UNG

The University of North Georgia is part of the University System of Georgia and is designated as a State Leadership Institution and The Military College of Georgia. With more than 18,000 students, the University of North Georgia is one of the state's largest public universities. The university offers more than 100 programs of study ranging from certificate and associate degrees to professional doctoral programs.

Positioned in the fastest-growing region of the state, UNG comprises five campuses united by a single mission focused on academic excellence and academic and co-curricular programs that develop students into leaders for a diverse and global society. The University of North Georgia was formed through the consolidation of North Georgia College & State University and Gainesville State College, two of the top-performing schools in the University System of Georgia, in January 2013.



UNG | UNIVERSITY *of*
NORTH GEORGIA™
THE MILITARY COLLEGE OF GEORGIA®





UNG | UNIVERSITY *of*
NORTH GEORGIA™
THE MILITARY COLLEGE OF GEORGIA®

If you need this document in an alternate format for accessibility purposes
please call contact Keith Antonia at Keith.Antonia@ung.edu.