

DEAD DROP



- Student Article: The Paradigms of Ubiquitous Technical Surveillance
- CIOO Study Abroad Update: São Paulo, Brazil
- Spring/Fall 2023 Course Schedule
- IC Scholarship, Internship & Job Opportunities



College of Applied
Science & Technology



Intelligence Community
**Centers for
Academic
Excellence**
Diversity. Knowledge. Excellence.

WHAT IS INSIDE...

DEAD DROP



College of Applied
Science & Technology



Intelligence Community
Centers for
Academic
Excellence
Diversity. Knowledge. Excellence.

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ICCAE INSTITUTIONS AROUND THE NATION



DEAD DROP

SPRING 2023

VOLUME 3 · ISSUE 5

THE UNIVERSITY OF ARIZONA

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Guest Contributor: Eric J. Eubank

ON THE COVER



Our cover features an unmanned aerial vehicle, or drone, widely used in intelligence, surveillance, and reconnaissance activities. Increasingly, drone technologies have been available as a commercial and recreational resource. Additionally, they have become great assets to surveillance/monitoring operations of various agriculture, real estate, construction, and telecommunications industries.

Photo: Pexels

Rutgers, The State University of New Jersey *

Borough of Manhattan Community College *
New Jersey City University *
City College of New York *

Saint Louis University

Harris Stowe State University *
Lincoln University *

Syracuse University

CUNY-CCNY/Grove School of Engineering *
CUNY/John Jay College of Criminal Justice *
Norfolk State University *
Wells College

University of Arizona *

Eastern Arizona College
Estrella Mountain Community College *

University of Central Florida

Seminole State College *
Daytona State College

University of Kansas

Dodge City Community College *
Garden City Community College *
Kansas City Kansas Community College
Seward County Community College

University of New Hampshire

College of Mount Saint Vincent *
Howard University *
Northern Essex Community College *
University of Massachusetts Lowell *

University of North Carolina in Charlotte

Johnson C. Smith University *
South Carolina State University *
Winston Salem State University *

University of Oklahoma – Norman *

Cameron University
College of the Muscogee Nation *
Langston University *

University of Southern California

Florida Agricultural and Mechanical University *
San Jose State University *
Santa Monica College *

Virginia Polytechnic Institute & State University

Danville Community College
Morehouse College *

* Denotes a Minority Serving Institution (MSI)



Congratulations!

CLASS OF 2023

CELEBRATE WITH US!

CAST Convocation Ceremony
May 10, 2023 5PM (Arizona Time)
Buena High School (Sierra Vista)

[Live Stream](#)

[Convocation Website](#)

VETS Center Graduation Ceremony
(for veteran and military affiliated students)

May 11, 2023 7PM (Arizona Time)
Student Union Memorial Center
(Tucson Main Campus)

[Convocation Website](#)

Main Campus Commencement

May 12, 2023 7:30PM
Arizona Stadium (Tucson Main Campus)

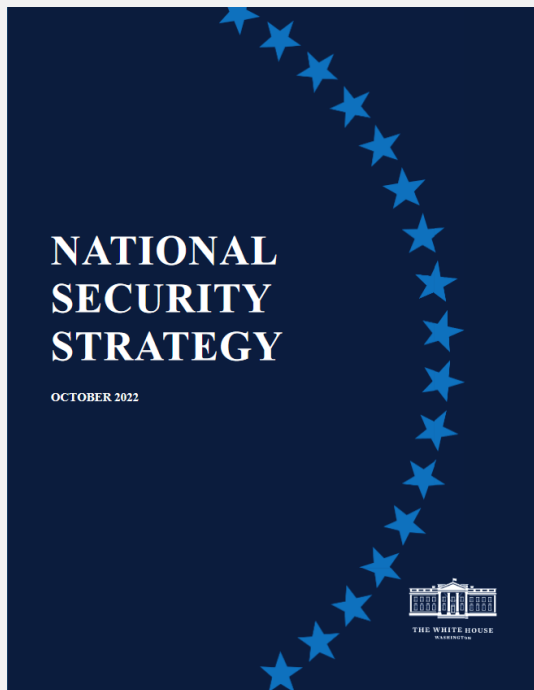
[Commencement Website](#)



**College of Applied
Science & Technology**

Good morning from your Intelligence and Information Operations program director. As current or aspiring intelligence professionals, it is important to stay current with geopolitical hot spots. Here are a few websites that belong in your bookmarks:

1. [Center for Strategic and International Studies](#): The Center for Strategic and International Studies (CSIS) is a “...bipartisan, nonprofit policy research organization dedicated to providing strategic insights and policy solutions to help decision makers chart a course toward a better world.” This resource covers an array of global security and intelligence subjects with a strong international flavor. This is another site I recommend registering for.
2. [2022 National Security Strategy](#): The NSS (National Security Strategy) is the capstone document for national security. It is the wellspring from which all other defense-oriented strategy documents are developed.



4 Photo: Washington, DC: The White House (Public Domain)



AF is Short of Water

With all the exciting developments in our chosen field, it is easy to forget that Intelligence Operations have a long and fascinating history. The Battle of Midway took place from 4 to 7 June, 1942 in the Pacific Theatre of World War II. The Imperial Japanese Navy had been running roughshod over the Pacific since the attack on Pearl Harbor six months prior. We have become accustomed to retaining a preponderance of military hardware when compared to real or potential adversaries. This was not the case as the Battle of Midway unfolded. The combined Japanese Fleet’s “Kido Butai” (Mobile Carrier Force) with four fleet Aircraft Carriers descended on three U.S. fleet carriers, including the miraculously reconstituted USS Yorktown.

Vice Admiral Yamamoto’s plan was to lure the remaining US Carriers into a decisive naval engagement. The numerous caprices and inability to read American resolve are beyond the scope of this article, but they are staggering. The undeclared hero of what British military historian John Keegan

described as “the greatest naval victory of all time” (Keegan, 2003) was the officer in charge of “Station Hypo,” Commander Joseph Rochefort. Station Hypo was the Navy cryptanalysts center at Pearl Harbor.

Cryptanalysis is defined by the Oxford Dictionary as “the art of deciphering coded messages without being told the key.” Note the term “art” in the definition. It takes a special kind of intelligence jockey to be successful in such an endeavor, and this was obviously well before the advent of computer technology. Station Hypo had started to decipher Japanese code in early 1942. Unlike the complete decryption of the Enigma Machine in the European Theatre of Operations, Station Hypo could only untangle a miniscule percentage of Japanese naval traffic. Based on painstaking analysis of this radio traffic, Rochfort and his team believed the code “AF” referred to the Midway Atoll. A member of Team Hypo recommended

broadcasting an un-encoded message that Midway was short of fresh water. Sure enough, soon after the famous “AF is short of water” message was decoded and the rest, as they say...is history.

Make sure to take a look at the information for our new course offerings. If you enjoy the challenging curriculum at CAST, tell a friend! We are always trying to build the program so we can offer even more dynamic content. Finally, I do not include my contact information for no reason. I genuinely enjoy speaking with students and offering guidance and assistance. We live in uncertain times, and it’s important to know we all care about and support one another. Call, text or email me any time you need to reach out to someone. Remember, I work for you, even though that may seem hard to believe when you are burning the midnight oil to turn in an assignment on time! 🐱

Contact the IIO Program Manager at:
ptortorici@arizona.edu or 602-451-9590 (mobile)



**Battle of Midway, USS Yorktown (CV-5), shortly after being targeted by three Japanese bombers on 4 June 1942.
Photo: National Museum of the U.S. Navy (Public Domain)**



**WE
WANT
YOU.**

U.S. Customs and Border Protection (CBP) Internship seeks high performing University of Arizona students in the Intelligence Information and Operations (IIO) program to support the **Southern Border Intelligence Center.**

Students will assist the Executive Director to coordinate meetings, compile deliverables, engage with other senior leaders across the southern border, and conduct taskings as needed. This position will provide the selected candidate(s) the opportunity to participate in intelligence planning at the strategic and operational level across the U.S. Government.



Purpose of the Internship:

As an all-source intelligence analyst, applicants will learn how to conduct research, form analytical conclusions, key judgements, and perform a variety of analytical techniques to answer key intelligence questions. Interns will learn the intelligence cycle, Intelligence Community Standards, a variety of analytical techniques, and an understanding of the complex border security environment.

Internship Available: Summer – Yes Fall – Yes Spring – Yes

Deadlines: Applications must be received by the first week of the previous semester, i.e. for an internship starting in the Spring semester, submit application within the first week of the previous Fall semester.

Agency Minimum Qualifications:

- You must be a U.S. Citizen to apply for this position
- Males born after 12/31/1959 must be registered with Selective Service
- Primary U.S. residency for at least three of the last five years
- **Background Investigation:** CBP is a federal law enforcement agency that requires all applicants to undergo a thorough background investigation prior to employment in order to promote the agency's core values of vigilance, service to country, and integrity. During the screening and/or background investigation process, you will be asked questions regarding any felony criminal convictions or current felony charges, the use of illegal drugs (e.g., marijuana, cocaine, heroin, LSD, methamphetamines, ecstasy), and the use of non-prescribed controlled substances including any experimentation, possession, sale, receipt, manufacture, cultivation, production, transfer, shipping, trafficking, or distribution of controlled substances. For more information visit [this link](#).

Agency Preferred Qualifications:

- Current University of Arizona Student within good standing, **minimum of a 3.0 GPA.**
- Students in their 2nd or 3rd year of study in an Intelligence, Criminal Justice, or National Security related field

Internship Description: Unpaid (Potential to earn college units/credits)

- Providing support to senior leadership that informs and enhances their ability to make strategic decisions;
- Providing support to senior level engagements on a variety of intelligence programs and activities;
- Providing assistance with management of intra-office relationships across multiple intelligence organizations.

To Apply:

Please submit a resume, school transcript, and a writing sample (2-5 pages) to lillian.abril@cbp.dhs.gov.

Expected Contact:

We will contact you within 3-5 business days upon receiving your application by email to set up an in-person interview.

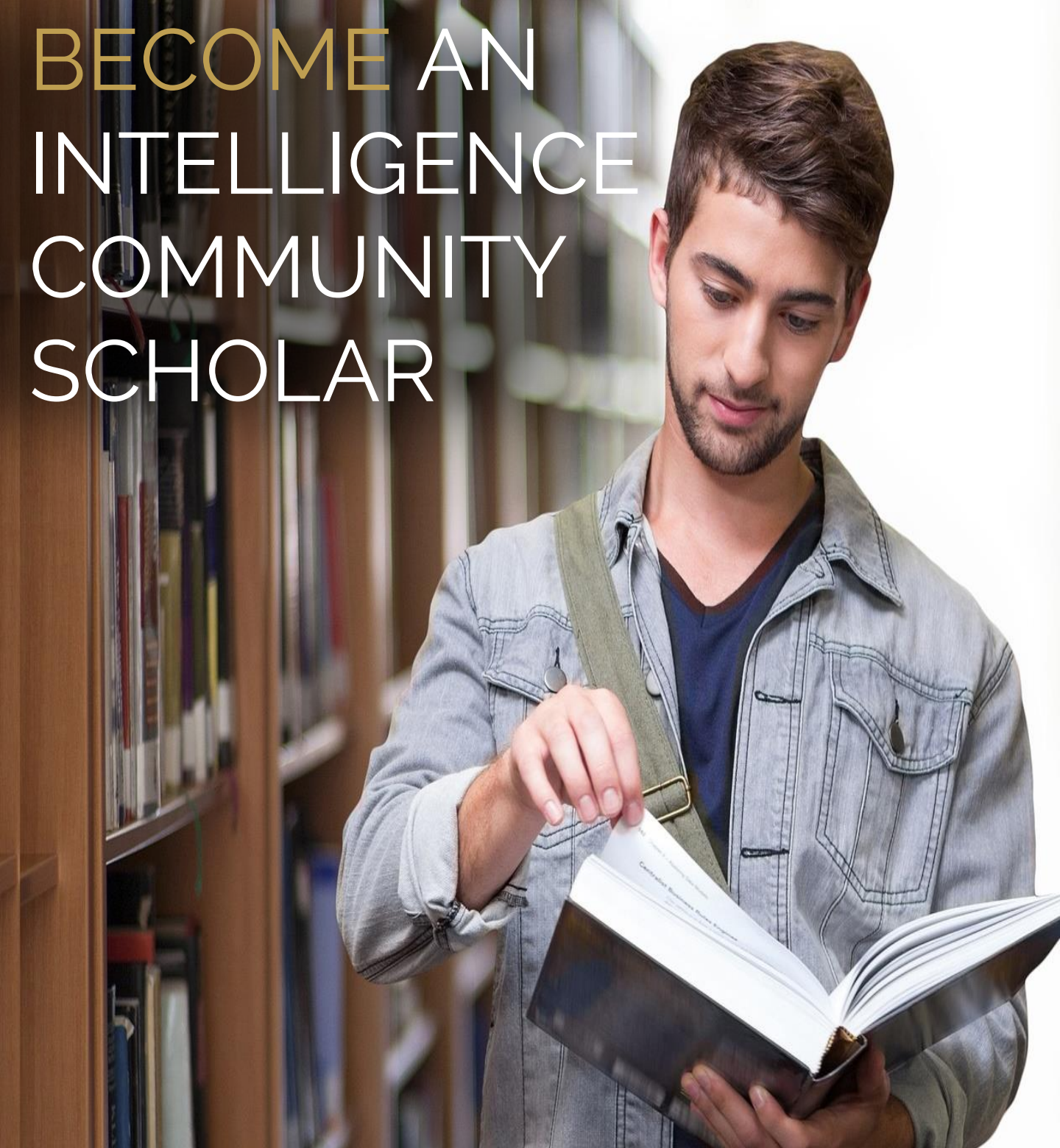
INTEL IMMEMORIAL

MOMENTS IN INTELLIGENCE
COMMUNITY HISTORY

The Cuban Missile Crisis of October 1962 marks a dangerous moment of a potential nuclear conflict between the United States and the Soviet Union - two global superpowers. In the heart of the Cold War, a U-2 reconnaissance and intelligence collection aircraft discovered clandestine operations by the Soviets to build nuclear missile sites on the island of San Cristobal, Cuba. Knowledge of immediate proximity and threat of medium-range and intermediate ballistic missiles could have triggered a declaration of war. However, President John F. Kennedy consulted with his advisors to place a naval line of defense, or "quarantine," around Cuba to prevent Russia from transporting additional supplies and missiles to Cuba. Additionally, vital diplomatic measures between the U.S., Soviet Union, and Cuban leaders resulted in Russia dismantling these nuclear sites and returning home without any escalation. *Photo: National Archives (Public Domain)*



BECOME AN INTELLIGENCE COMMUNITY SCHOLAR



Intelligence Community
**Centers for
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Diversity. Knowledge. Excellence.

EXCELLENCE STARTS HERE.

WHY BE AN IC SCHOLAR?

IC Scholars are sought after by the U.S. Intelligence Community and receive hiring preference for government jobs. Specifically, IC Scholar graduate applications through USAJobs and IC Careers will be given more points than non-graduates, much like veterans are given more points more than non-veterans. The designation also sets graduates apart in the corporate sector.

ARIZONA ICCAE CONSORTIUM

The Arizona Intelligence Community Center for Academic Excellence (ICCAE) Consortium is a pipeline from high school through community colleges and into the University of Arizona. After graduation, highly-qualified graduates have a natural pathway to a job in the intelligence community. Estrella Mountain Community College and Eastern Arizona College are flagship Arizona ICCAE schools each with degree programs that provide a pathway to finishing your four year degree and a career into the IC.



**ESTRELLA MOUNTAIN
COMMUNITY COLLEGE**
A MARICOPA COMMUNITY COLLEGE

estrellamountain.edu



eac.edu

BENEFITS OF BEING AN IC SCHOLAR

- Selective entry into special internships
- Access to select Intelligence Community hiring events
- Preference for study abroad opportunities
- Competitive designation sets you apart for a corporate career

LEARN MORE

ciio@arizona.edu

Phone: (520)626-2442 ext. 2120

IC CAE Speaker Series 2023

Security Clearance Process and Polygraphs

SPEAKER

JAMIE WILSON

Branch Chief, Analysis and Mitigation (A&M), DoD Insider Threat Management and Analysis Center (DITMAC)

Join us for our IC CAE Speaker Series in 2023! This is a series of virtual events that will highlight important themes in the Intelligence Community, providing students and faculty professional development.

MONDAY

May 22, 2023
Starts at 4:00 PM AZ

[Register Here](#)



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Diversity Knowledge Excellence



College of Applied Science & Technology

Cyber Convergence Center

SPEAKER BIO

JAMIE WILSON

Mrs. Wilson began her government service in 2003 as a contract background investigator and trainer for the United States Office of Personnel Management (OPM). She served in that capacity until late 2005 when she accepted a position working as an analyst for the U.S. Department of the Navy's Personnel Security Appeals Board. This was a unique experience working with members of both the U.S. Navy as well as the U.S. Marine Corp who were appealing the government's intent to remove their security clearance status. Since 2006, Mrs. Wilson had proudly served the Intelligence Community (IC) and Department of Defense (DOD) for over 14 years as an employee of the National Geospatial-Intelligence Agency (NGA). Her tenure with NGA has been devoted to supporting the establishment of successful architectures for both the Personnel Security and Counter Insider Threat offices and professionals. Much of her career was spent expanding her role as a Personnel Security subject matter expert through her assignment as a senior adjudicator, trainer, and team lead. During the last six years of Mrs. Wilson's federal service, she has served as the Team Lead, Investigations Division, NGA's Counter Insider Threat program. As such, she has been fortunate to offer lessons learned and became an advocate for the advancement of insider threat programs in all agencies. Mrs. Wilson currently serving in a Joint Duty position with the DoD Insider Threat Management and Analysis Center.

Mrs. Wilson holds certifications in both Adjudications and Due Process. She also holds a certification in Counter Insider Threat Fundamentals.

Mrs. Wilson has a B.S. and a Master's degree from East Tennessee State University.

She currently resides in Ranson, WV with her husband Lee, three dogs and two horses.

STUDYING ABROAD IN

SÃO PAULO, BRAZIL

BY CARLA BULDRINI, C3 PROJECT OFFICER



Last month, College of Applied Science & Technology (CAST) students concluded the onsite portion of the Study Abroad Program in Brazil. Five students had the opportunity to visit São Paulo State and explore different parts of the culture and the country, and gain a deep understanding of the unique characteristics that make Brazil such a fascinating place.

Upon arrival in Brazil, students went to Avare, where Universidade Sudoeste Paulista (UniFSP), the university that partnered with CAST for Study Abroad is located. This area is in the countryside of the State, where students can see the way of life of the locals and explore the natural beauty of Brazil. They also had the opportunity to interact with local students and faculty, as well as participated in Portuguese classes on campus.

Students spent some time in one of the

major cities of the country, São Paulo. They were able to explore the vibrant urban culture, visit the São Paulo Museum of Art, and sample the delicious local cuisine.

During the trip, students traveled to an island in the State of São Paulo, Ilhabela. There they experienced traditional music, food and had the opportunity to learn about the history and culture of the local population and gain a deep understanding of the challenges facing these communities today.

Throughout the trip, students had the chance to improve their Portuguese language skills. Along with the language classes, they practiced speaking with locals, and ultimately gave them the true language immersion experience.

Overall, a study abroad experience can be an incredible one to students. It allows them to gain a deep understanding of the



CAST students and staff engaging with Study Abroad partners at Universidade Sudoeste Paulista (UniFSP) in Avare, São Paulo. Photo: Carla Buldrini



CAST students and staff enjoy a hiking adventure at Trilha da Cachoeira in Ilhabela - State of São Paulo, Brazil
Photos: Carla Buldrini

country's rich cultural heritage, learn about traditional and modern life, and improve their language skills. By the end of the trip, students had a newfound appreciation for the beauty and complexity of Brazilian culture, and they will be able to apply their knowledge and experience to their studies or future career endeavors.

As part of the IC CAE grant, the Study Abroad Program is a 15-week course during Spring semester (January to May) featuring weekly language immersion and social sciences instruction covering the political, economic, social, historical, and other civil-military aspects of a foreign country.

Students participate virtually most of the program, and part of the group can travel abroad for two weeks for the onsite portion. This experience exposes students to the factors which future intelligence analysts and cyber threat analysts must consider while developing broad perspectives that inform self-awareness and the analyst's ability to discern bias, evaluate sources of

information, and acknowledge diverse viewpoints/perspectives of cultures, societies, and people.

In 2024, Study Abroad students will learn about Italy, and selected students will have the opportunity to go to Rome. Keep an eye out for this amazing program! Applications will start next Fall. 🐾

**SOLVE THIS
CRYPTOGRAM**

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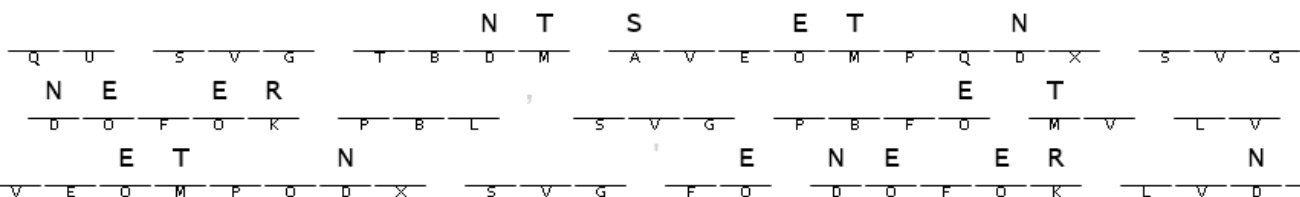
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-Author unknown



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THE PARADIGMS OF UBIQUITOUS TECHNICAL SURVEILLANCE

Q&A WITH CRAIG NAZARETH AND ERIC J. EUBANK



Eric J. Eubank is a student with the University of Arizona College of Applied Science and Technology and is completing an undergraduate degree in Intelligence and Information Operations. He is currently taking INTV 350 Collection Operations with Professor Craig Nazareth, a retired Military Intelligence Army Officer. Eric offered to provide this overview of Ubiquitous Technical Surveillance due to the alarming growth of digital devices each with alarming capabilities to surveil all aspects of human interaction and personal life. We asked Eric some pertinent questions to help us understand this paradigm of digital sensing in hopes of raising awareness of its threats and opportunities.

Professor Nazareth: Eric, what is ubiquitous technical surveillance?

Eric Eubank: According to Ridgeline International, Ubiquitous Technical Surveillance (UTS) refers to the collection and long-term storage of data in order to analyze and connect individuals with other people, activities, and organizations. Some may remember the buzz about “The Internet of Things,” and the implication that the internet is actually a composite of virtual and physical things all interconnected. The association a consumer may make with various devices in their life that promote convenience, security, or both. This could be an Amazon Alexa, Roomba, home security system, and wireless voice-controlled light and outlet switches connected to the consumer’s home internet. Some may come with subscriptions, or some may be free of charge. It is important to remember that nothing is free when it comes to services in the technology realm, and if businesses offer a service and product without an

upfront cost or subscription, it means the consumer and the consumer’s information is actually the product.

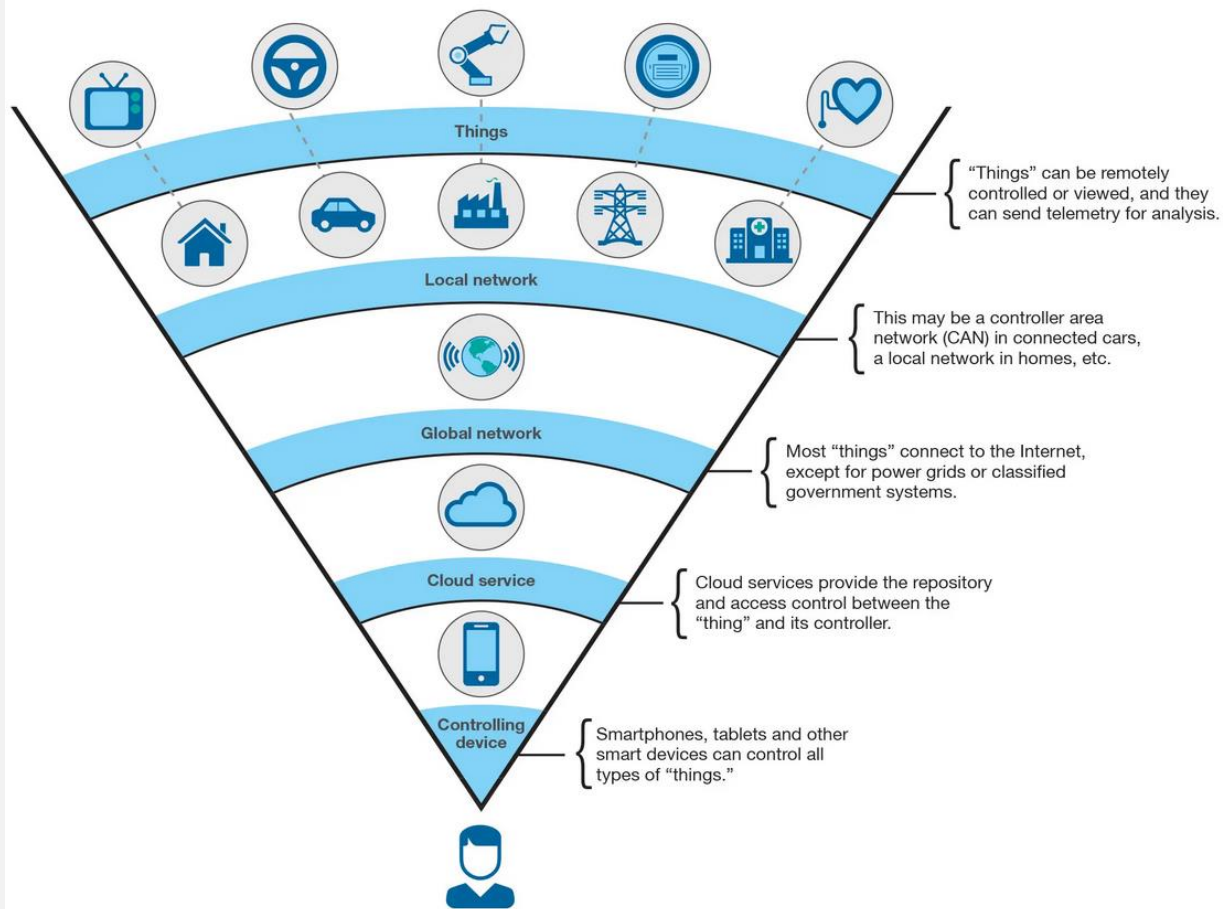
Professor Nazareth: Ok, so this technical surveillance is planned and integrated into devices because it offers businesses a cost-effective method to increase their competitive advantage- by gaining more insight on their customer preferences and behaviors?

Eric Eubank: Yes- let me give an example. Every device a consumer owns is typically intertwined with the internet itself, and future devices the consumer may choose to own are targeted to consumers based on these preferences. In the interest of brevity, I will limit this example to a consumer’s cell phone- how the cell phone collects data that reveals detailed information on an individual consumer and how that data is used to easily track the consumer and develop associations to other consumers and products.

A cell phone and its associated devices that connect to the internet or use data plans are associated with advertisement identifications, or Ad IDs. If the consumer has an Apple iPhone with Google and Facebook accounts logged into the device, businesses integrate software to identify the consumer using unique Ad IDs for each platform. The three unique Ad IDs associated with the device in this example provide data that companies can exploit, resulting in highly profitable transactions for the companies that collect the information because the information allows the business to sell ads based on the consumer’s preferences and behavior.

Businesses use various data sets from the consumer’s device to build a consumer

IBM model for the Internet of Things



Graphic: IBM Model for the Internet of Things and Ubiquitous Technology Factors
Source IBM X-Force, Research and Development Intelligence Index (Public Domain)

profile based on the Ad ID association. The device's built-in telemetry (measurements or other data collected and transmitted remotely), Global Position Sensors (GPS) data (locational data), cookie data from websites (internet activity data), permissions data from downloaded apps (app preference data), etc... to provide a unique marketing structure tailored to that consumer and their lifestyle, and other consumers that match a similar profile.

Consumers take their phones with them everywhere, in most cases. The telemetry and GPS data that persistently collects to provide them with accurate directions to a new restaurant, or to their place of work, or to a colleague's home is also used to

provide the company a highly accurate picture of the routes they take, and the retail locations they pass that may be used to further exploit them on the marketing front. Even if the device is off, the phone has a basic input/output system, or BIOS, which is firmware used to provide runtime services for operating systems and programs and to perform hardware initialization during the device's booting process. Coupled with an unremovable battery the device essentially remains on and can collect the aforementioned data. Based on the G-Forces of the consumer's turns, and speed in which the consumer travels, the consumer's general direction of travel, turns made, and locations visited during the time the phone was off can still be retrieved and

exploited.

Professor Nazareth: There is a treasure trove of data available to these businesses. Could you give us an example of how a business would put this data to use?

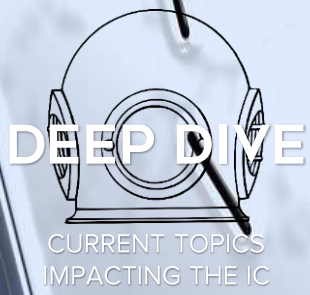
Eric Eubank: For example, If the consumer recently purchased a home, it is highly likely the information is known by large retailers for the simple fact the information is public and available for purchase, retrieved through open source methods, or Artificial Intelligence algorithms designed to scrape the internet where data is housed. Retailers frequently buy Ad IDs to hone their marketing to what the consumer most likely will need; frequently paying for updated Ad IDs in the areas of marketing interest. If new Ad IDs persistently populate in the area of interest, the retailer will push marketing notifications to previously purchased e-mail addresses associated to those new consumer's devices. Most people underestimate the ease with which a company can purchase Ad IDs – and for how little it costs monetarily in the grand scheme. It is quite easy to purchase the information through open-source platforms that present a map, and only require the researcher to create an outline of the area of interest, then populate the Ad IDs.

Let's imagine a consumer never associated their device to a friend's home, or their place of work. However, at their place of work they logged into their Google account to retrieve an e-mail, and at their friend's house they logged into Facebook. Their friend's home and their place of work is now undoubtedly and indefinitely tied to the consumer's device due to the log ins, regardless of the actual physical association of the consumer's device to said locations.

There are few laws regarding protection of consumer information with regards to Ad IDs and applications associated with the devices due to the consent banners and terms and service agreements consumers frequently overlook and immediately agree to.

Now associate this information to a Government entity that is conducting research in the interest of National Security. Imagine the consumer in this scenario is a Human Intelligence collector. The associations these individuals make with others formulates a visible and exploitable network of people due to proximity associated with time, distance, and direction. A collector's network could be completely exposed, and they could find themselves as the center node in an analyst's association matrix if mitigations are not employed prior to their activities. Even if mitigations are employed, would it create enough of a signature that an analyst could exploit the collector's activity due to a change or deviation in their baseline?

Ad IDs contain powerful information that not only retailers use and exploit on a daily basis. Understanding the facts surrounding how Ad IDs are used, and what information specifically can be collected, will provide greater understanding of associations between entities on the battlefield, or long before an adversary's troops reach the battlefield. 🐱



BIG DATA

Big Data (and the conversations surrounding the volume, velocity, veracity, variety, and value of information) remains an emerging topic in the intelligence community. Increasingly, many intelligence-driven institutions rely on data to drive various intelligence actions to ensure our national security. Newer technologies in artificial intelligence and machine learning cannot exist without access to massive data sources to analyze complex problem sets. Nonetheless, the ever-growing data pools can potentially cause underlying issues with data security, quality, and reliability, and usability of Big Data, especially when the information is only valuable for a short period.

We urge our IIO students to research topics that inspire your critical thinking skills. Topics around Big Data may become your subject matter in your new career within the intelligence community! Follow the links below to learn more.

[Journal Article: Big Data Analytics in the Metaverse](#)

[Journal Article: Journal Article: Redefining Military Intelligence Using Big Data Analytics](#)

[YouTube: US Army War College - Small Wars and Big Data](#)

[Podcast: Roaring Elephant - Bite-Sized Big Tech](#)

[YouTube: Big Data Solution for DoD](#)



MESSAGE FROM YOUR ACADEMIC ADVISOR

Enrollment for Fall 2023 is open.

Do not miss these exciting course opportunities!

Courses often fill quickly, so enroll early to get the best selection! Please touch base with your academic advisor to verify the courses you plan on taking are in line with your degree plan.

Schedule an appointment with your advisor if you need additional academic support with your degree plan or any enrollment needs.

FOR MORE INFORMATION CONTACT YOUR ADVISOR AT:

>> <https://azcast.arizona.edu/student-services/advising/meet-your-advisor>

COURSE SCHEDULE

SPRING 2023

SEVEN WEEK - FIRST

CAT#	COURSE	PROFESSOR
CYBV437*	Deception, Counter-Deception & Counterintelligence	Benson, Michael
INTV305	Introduction to IIO	Phillippi, Emilee
INTV326	Introductory Methods of Intelligence Analysis	Nazareth, Craig
INTV350	Intelligence Collection	Nazareth, Craig
INTV353	Geospatial Intelligence	Zsambok, Billy
INTV459	Intelligence, Surveillance, and Reconnaissance Synchronization	Wisecup, Tyler
INTV496	Special Topics in IIO	Hilliard, Christopher

SEVEN WEEK - SECOND

CYBV450*	Information Warfare	Giordano, Joseph
INTV305	Introduction to IIO	Phillippi, Emilee
INTV326	Introductory Methods of Intelligence Analysis	Tortorici, Patrick
INTV350	Intelligence Collection	Nazareth, Craig
INTV377	Psychological Operations	Hilliard, Christopher
INTV401	Introduction to Law Enforcement Intelligence	Tortorici, Patrick
INTV427	Intelligence Support to Targeting	Tortorici, Patrick
INTV455	Target-Centric Analysis	Nazareth, Craig
INTV459	Intelligence, Surveillance, and Reconnaissance Synchronization	Wisecup, Tyler
INTV496	Special Topics in IIO	Pinnow, Jennifer

15 WEEK

INTV493	Internship in IIO	Tortorici, Patrick
INTV496	Special Topics in IIO	Tortorici, Patrick
INTV498	Senior Capstone in IIO	Hilliard, Christopher

* Courses offered as electives

COURSE SCHEDULE

FALL 2023

SEVEN WEEK - FIRST

CAT#	COURSE	PROFESSOR
CYBV437*	Deception, Counter-Deception & Counterintelligence	Benson, Michael
INTV305	Introduction to IIO	Staff
INTV326	Introductory Methods of Intelligence Analysis	Nazareth, Craig
INTV350	Intelligence Collection	Nazareth, Craig
INTV353	Geospatial Intelligence	Zsambok, Billy
INTV377	Psychological Operations	Hilliard, Christopher
INTV459	Intelligence, Surveillance, and Reconnaissance Synchronization	Wisecup, Tyler
INTV496	Special Topics in IIO: Ukraine War	Hilliard, Christopher

SEVEN WEEK - SECOND

CYBV450*	Information Warfare	Giordano, Joseph
INTV305	Introduction to IIO	Phillippi, Emilee
INTV326	Introductory Methods of Intelligence Analysis	Tortorici, Patrick
INTV350	Intelligence Collection	Nazareth, Craig Tortorici, Patrick
INTV401	Introduction to Law Enforcement Intelligence	Tortorici, Patrick
INTV455	Target-Centric Analysis	Nazareth, Craig
INTV459	Intelligence, Surveillance, and Reconnaissance Synchronization	Wisecup, Tyler
INTV496	Special Topics in IIO: Transnational Crime	Pinnow, Jennifer

15 WEEK

INTV493	Internship in IIO	Tortorici, Patrick
INTV496	Special Topics in IIO	Tortorici, Patrick
INTV498	Senior Capstone in IIO	Hilliard, Christopher

COURSE HIGHLIGHTS

INTV 401

Introduction to Law

Enforcement Intelligence

Fall 2023, Seven Week - Second

Designed to provide Intelligence and Information Operations students with an opportunity to explore the integration of intelligence-led policing with community-based policing and problem-oriented policing. Focus will be placed on educating students on the process of developing raw information into actionable intelligence, thereby allowing field officers to be more effective during routine law enforcement functions. Students will also learn the intelligence principles that exist within the daily operations of law enforcement.

This course is 7.5 WEEKS, **FULLY ONLINE** Upcoming Classes: Fall 23 (Seven Week Two (October 12th - December 6th , 2023) designed for anyone interested in the dynamic interaction between operational law enforcement intelligence and intelligence theory.

Topics covered include:

- Fusion Centers and the National Criminal Intelligence Sharing Plan
- Digital Forensics and Technology in Law Enforcement Intelligence
- Transnational Organized Crime and Human Trafficking
- Counter Drug and Task Force Operations
- Intelligence Activities and Doctrine in Local, State and National Law Enforcement Agencies
- Intelligence Led Policing Theory and Practice



INTV 496

Transnational Crime and Human Smuggling

Fall 2023, Seven Week - Second



Do you want to better understand Transnational Crime and Human Smuggling? **INTV 496 - Special Topics in Intelligence and Information Operations (Transnational Crime & Human Smuggling)**, offers an in-depth examination of the causes, impacts, and mitigation opportunities for this fascinating subject. INTV 496 is a 7.5-week online course available Fall 2023, Seven Week - Second. Students from all degree programs are welcome to register. This course features guest speakers from federal and state law enforcement agencies sharing their expertise and unique perspectives to the discussions. Students will conduct research, reach conclusions, and present their ideas as short briefings. Check out the academic course catalog and contact your advisor if you are interested in this exciting learning opportunity.





INTV 489

Evolution of Armed Conflict

Coming Soon!

Seven Week One, Spring 2024

INTV 489 - Evolution of Armed Conflict offers a “deep dive” into the origins, events, effects, potential outcomes, and lessons of a present-day major military conflict. Students will research assigned topics and present their findings via briefings and discussions. The course is fully online. Students will use analytic formats like Intelligence Preparation of the Operating Environment (IPOE) to organize their investigation of the setting, participants, effects, and possible outcomes the selected conflict. Students will conduct research, reach conclusions, and present their ideas as short briefings. All majors are welcome to enroll with no prerequisites.



INTV 496

Ukraine War

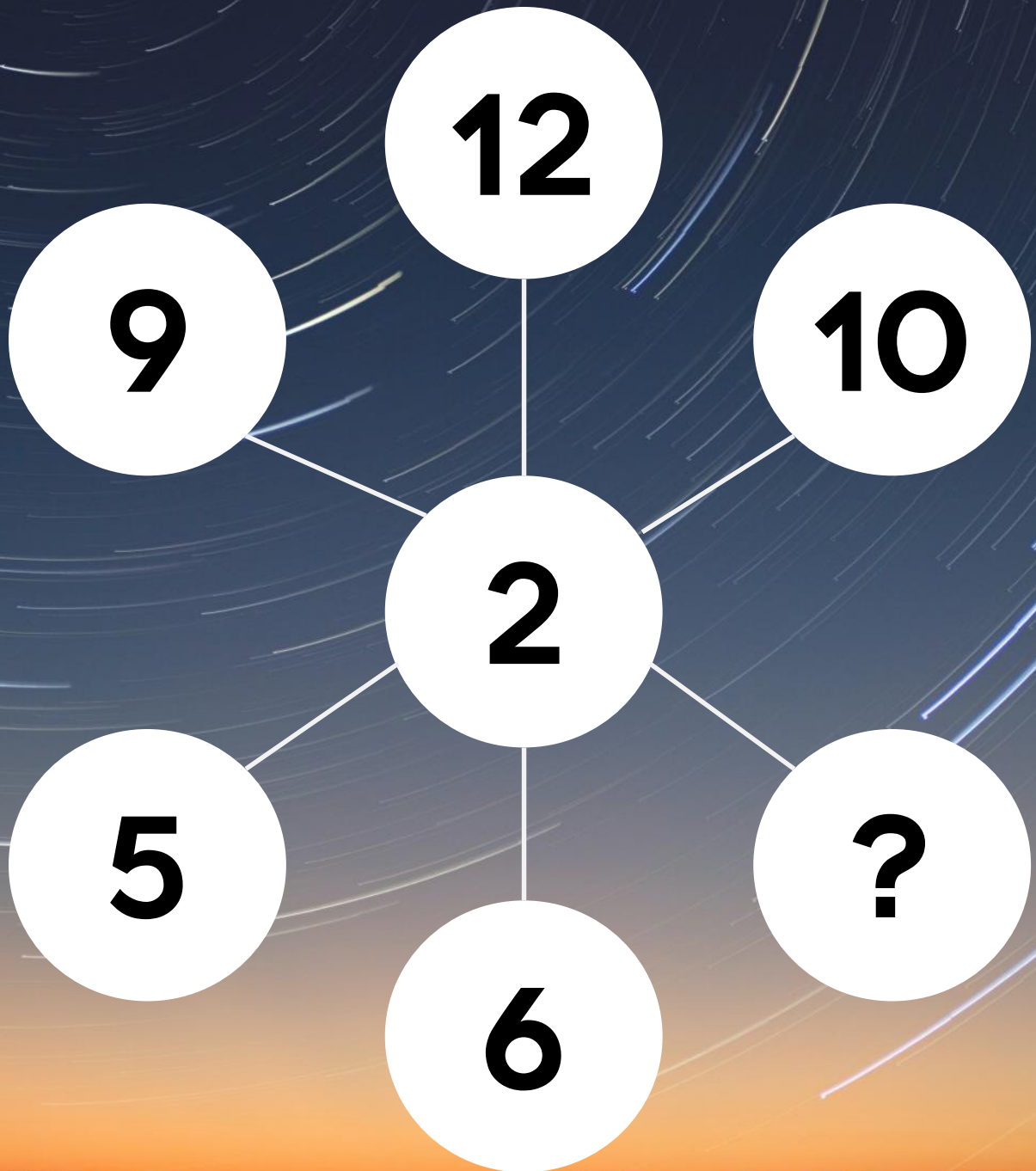
Seven Week One, Fall 2023



INTV 496 - Special Topics in IIO (Ukraine War), offered fully online, is a “deep dive” into the origins, events, effects, and potential outcomes of Russia’s invasion of Ukraine. Students will use analytic formats to organize their investigation of the setting, participants, effects, and possible outcomes of the war in Ukraine during weekly discussions. Invited national security experts will add their valued perspectives. Students will conduct research, reach conclusions, and present their ideas as short briefings. Join discussions with other curious students in an in-depth examination of the causes, impacts, and next steps of the war in Ukraine. All majors are welcome to enroll with no course prerequisites.



WHAT IS THE MISSING NUMBER
IN THIS PUZZLE?





Women in Cybersecurity

We are looking for passionate student leaders to establish the WiCyS Student Chapter in the University of Arizona.

Want to drive the change needed in the cybersecurity workforce and gain access to industry and academic leaders who are eager to help you succeed?

CONTACT DR. DALAL ALHARTHI

EMAIL: DALHARTHI@ARIZONA.EDU



UNITED STATES INTELLIGENCE COMMUNITY

INTERNSHIP OPPORTUNITIES FOR STUDENTS

TO LEARN MORE VISIT WWW.INTELLIGENCECAREERS.GOV/ICSTUDENTS.HTML



NATIONAL RECONNAISSANCE OFFICE

www.nro.gov/careers/cia-intern.html

Application period opens September, selections are typically made by October
Paid undergraduate and graduate internship programs
CIA assigns interns from their applicant pool to work at NRO

Specific programs of interest include:

STEM	Computer Science	Human Resources
Economics	Physical Science	Business Administration
Political Science	Data Science	Science and Research



DEFENSE INTELLIGENCE AGENCY

www.intelligencecareers.gov/icstudents.html

Application period opens and closes at various times
Paid undergraduate, graduate, and foreign language internship programs
Workforce Recruitment Program for disabled persons (www.wrp.gov)

Specific programs of interest include:

Political Science	Global Studies	Computer Sciences
Business	Human Resources	Law/Criminal Justice
Natural Sciences	Engineering	Logistics



DEPARTMENT OF HOMELAND SECURITY

www.dhs.gov/ia-internship

Application period opens early-to-mid October
Paid undergraduate and graduate internship programs
Secretary's Honor Program for recent graduates

Specific programs of interest include:

Intelligence Analysis	Law Enforcement
Cybersecurity	Legal
Health/Science	Public Affairs
Information Technology	Management/Support
Emergency Management	



DEPARTMENT OF STATE

Careers.state.gov/intern/student-programs

Application period opens in the fall
Paid undergraduate and graduate internship programs

Specific programs of interest include:

- Student internship Program: opportunities to work in U.S. Embassies and Consulates' throughout the world
- Pathways Internship Program: opportunities to explore Federal careers
- Numerous Fellowship Programs
- Virtual Foreign Service Internship Program
- Workforce Recruitment Program for disabled persons (www.wrp.gov)



NAVAL INTELLIGENCE ACTIVITY

<http://www.oni.navy.mil/Join-Us/Intern-Programs>

Application period opens September - October
Paid undergraduate and graduate internship programs

Specific programs of interest include:

Intelligence Analysis	Geospatial Analysis	Intelligence Analysis
Scientific Analysis	Technical Analysis	Information Technology
Engineering	Workforce Planning	Research & Development



MARINE CORPS INTELLIGENCE ACTIVITY

www.hqmc.marines.mil/intelligence/Student-Employment/

Application period opens early-to-mid September
Paid undergraduate and graduate internship programs

Specific programs of interest include:

Intelligence Analysis	Geospatial Analysis	Intelligence Analysis
Scientific Analysis	Technical Analysis	Information Technology
Engineering	Workforce Planning	Research & Development



NATIONAL SECURITY AGENCY

www.intelligencecareers.gov/icstudents.html

Application period opens April - September/October for Language Program
Paid undergraduate and graduate internship programs

Specific programs of interest include:

STEM	Intelligence Analysis	Research/Development
Cyber Security	Human Resources	Information Technology
Logistics	Foreign Language	Information Management
Computer Science	Science and Research	Strategic Communications



CENTRAL INTELLIGENCE AGENCY

www.cia.gov/careers/student-opportunities

Applications accepted year round for most programs; apply one year before preferred start date - For DO and scholarship programs apply December-March and February-July, respectively
Paid undergraduate and graduate internship programs

Specific programs of interest include:

Political Science	Cartographer	Computer Science
Data Science	Education/Training	Human Resources
Graphic Design	Cyber Security	Information Management
STEM	Library Science	International Relations
Media Analysis	Economics	



UNITED STATES INTELLIGENCE COMMUNITY

INTERNSHIP OPPORTUNITIES FOR STUDENTS

TO LEARN MORE VISIT: WWW.INTELLIGENCECAREERS.GOV/ICSTUDENTS.HTML



DEPARTMENT OF ENERGY

www.energy.gov/jobs/services/students-recent-graduates

Application period opens and closes at various times
Paid internships available for current undergraduates, current graduates and recent graduates

Specific programs of interest include:

STEM	Engineering	Research & Development
Energy Law	Information Technology	Sciences
Social Sciences	Business	Information Management



FEDERAL BUREAU OF INVESTIGATION

www.fbijobs.gov/students

Application period opens early-to-mid August
Applications accepted throughout the year for Visiting Scientist Program
Paid undergraduate and graduate internship programs

Specific programs of interest include:

- Honors Internship Program which includes opportunities at FBI field offices throughout the U.S., FBI Academy, FBI Headquarters, and other off-sites
- Visiting Scientist Program which includes opportunities for undergrad, graduate, recent grads, postdoctoral fellows, and university faculty to work at the FBI Laboratory



MARINE CORPS INTELLIGENCE ACTIVITY

www.hqmc.marines.mil/intelligence/Student-Employment/

Application period opens early-to-mid September
Paid undergraduate and graduate internship programs

Specific programs of interest include:

Intelligence Analysis	Geospatial Analysis	Intelligence Analysis
Scientific Analysis	Technical Analysis	Information Technology
Engineering	Workforce Planning	Research & Development



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Graphic Design	Cyber Security	Information Management
STEM	Library Science	International Relations
Media Analysis	Economics	



VSFS

V I R T U A L S T U D E N T F E D E R A L S E R V I C E

INTERN FROM ANYWHERE

The U.S. Department of State is currently accepting applications for the [Virtual Student Federal Service \(VSFS\)](#).

The **Virtual Student Federal Service** is the largest virtual internship program that offers talented college students unique mentoring and exposure to job opportunities within the U.S. government. Since 2009, more than 10,000 remote interns have advanced the work of the federal government. The time commitment is about 10 hours per week during the school year. There are opportunities for all, from data visualization to political analysis. Internships are unpaid but opportunities in the federal government. VSFS.

Each year, applications are open to U.S. college students during the entire month of July. Go to [VSFS](#) to see the 950+ projects available. Then, create an account on USAJOBS.gov, build a resume, and apply to the [VSFS Vacancy Announcement](#). VSFS does not require any documentation, but you may upload transcripts in your USAJOBS profile if you like. The most important part of your VSFS application is your personal statement of interest.

All applicants must be U.S. citizens in student status at a university or college in the U.S. or abroad. VSFS is open to undergrad through PhD candidates taking classes full or part-time, in-person or online.



U.S. DEPARTMENT *of* STATE

♦ CAREERS REPRESENTING AMERICA ♦



The Air Force Civilian Service and United States Space Force (USSF) are looking for soon-to-be graduates (May/June 2023) or recent graduates (within the last two years) to staff their entry-level civilian careers throughout our workforce.

We have opportunities across a multitude of different career fields from Financial Management, Engineering, Program Management, Logistics, Human Resources, and Contracting and are located on military bases across the country.

If you are interested in supporting space systems acquisitions, working with contractors to ensure our space systems perform as intended, making decisions that drive critical space capabilities for the nation, and helping develop new space capabilities, the USSF is a great place to work.

For more information & to apply go [HERE](#).

Hispanic Association of Colleges and Universities (HACU) Scholarship Program - Spring 2023 Application Cycle Deadline: Monday May 1st, 2023

HACU is pleased to be the administrator of scholarship opportunities provided by our partners to assist in defraying some of your college expenditures. Additional scholarship opportunities may be added during the Spring 2023 semester as they become available. In addition, all scholarship applicants **MUST** meet the following [criteria](#).

All applicants must email their resume to CHNIP@hacu.net, and for more information about HACU and the scholarship application process, click [HERE](#).





National Military Intelligence
Foundation | NMIF

Peace Through Vigilance

Merit Scholarship 2023-2024 Academic Year

The National Military Intelligence Foundation (NMIF) is pleased to announce its annual competition for scholarships to support students pursuing courses of study and formal degrees in intelligence studies and related disciplines.

Applications are due May 28, 2023!

Download the application and read more about the application process [here](#).

To learn more about NMIF's mission and goals, follow the link [here](#).

JOB BOARD



IC agencies and industry partners are looking for future intelligence professionals like you! Below are current positions currently offered in IIO fields. For more job listings, please look at the job search engines on the Career Resources page.

Cryptanalysis Development Program (CADP) - Entry to Experienced Level

National Security Agency

Job Location: All NSA Locations

Pay Plan: GG

Open: 2023-03-17 – 2023-05-12

[Job Posting](#)

Linguist / Language Analyst - Entry to Experienced Level (MD, HI, GA, TX, UT, CO & AK)

National Security Agency

Job Location: All NSA Locations

Pay Plan: GG

Open: 2023-04-03 – 2023-05-03

[Job Posting](#)

Collection Professional - Entry to Exp Level (MD, CO, HI, TX)

National Security Agency

Job Location: All NSA Locations

Pay Plan: GG

Open: 2023-01-25 – 2023-04-21

[Job Posting](#)

GEOINT Hybrid Analyst (Doral, FL)

National Geospatial Intelligence Agency

Job Location: Springfield, VA

Pay Plan: IA

Open: 2023-04-17 – 2023-04-29

[Job Posting](#)

Data Steward (Defense Geospatial Co-Production Data Steward)

National Geospatial Intelligence Agency

Job Location: Springfield, VA

Pay Plan: IA

Open: 2023-04-17 – 2023-04-29

[Job Posting](#)

Customs and Border Protection Officer

U.S. Customs and Border Protection

Location: Arizona

Pay Plan: N/A

Open: Open rotation

[Job Posting](#)

Law Enforcement Response Specialist

Turo

Pay Plan: ASRS

Location: Remote in phoenixTempe, AZ

Open: 2023-04-20 – TBD

[Job Posting](#)

CAREER RESOURCES

Industry employers partners, contractors, federal agencies are looking for the best job candidates to fill a number of critical positions in the Intelligence Community.

U.S. Intelligence Careers



Great resource to research jobs throughout the Intelligence Community seeking various intelligence and information analysis skills. You can also find the latest scholarships and internships offered year-round.

> intelligencecareers.gov

USAJOBS



Widely known and respected job search tool. Find job listings with various government sectors in and out of the Intelligence Community. In addition, this site offers the ability to draft both federal and standard resumes through its internal resume builder.

> usajobs.gov

Indeed



One of the most trusted job search engines in nation! You will be able to find a number of job postings that serve many sectors of the intelligence industry. Indeed also offers a resume uploader where you can store your pre-produced resume for easy application submissions.

> indeed.com

LinkedIn



One of the most effective ways to find employment is through your professional network. LinkedIn has become the industry standard social platform to connect professionals with industry leaders and hiring managers. Create your profile, engage and communicate with colleagues and recruiters, and plan your new future today!

> <https://www.linkedin.com>

Clearancejobs/ Clearedjobs.net



ClearanceJobs®



Both sites offer pathways to employment for those students that currently hold an active or current security clearance. Most jobs listed are for federal and contract positions. Create and account and search these offerings.

> clearancejobs.com
> clearedjobs.net

Solve This: Cryptogram Phrase: "If you want something you never had, you have to do something you've never done."
Logic Lounge: The answer is 18. Multiply the 1 digit number by 2 to get the opposite number.



Handshake

Talent, Meet Opportunity.



Get hired. Apply for jobs and internships offered on campus, in your local area or across the nation.



Get discovered. Stand out among your peers to reach employers actively recruiting Wildcat candidates.



Get connected. Build social networks with peers for tips to land your desired job or internship.



Get involved and make an impact. Discover on-campus and virtual career-focused training events.

arizona.joinhandshake.com

login with your NetID and password



THE UNIVERSITY
OF ARIZONA

check yourself!

MITIGATING OUR BIASES TO BECOME
BETTER INTELLIGENCE PROFESSIONALS



LAW OF THE INSTRUMENT

“ I suppose it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail.” - Abraham Maslow

The **law of the instrument** (also known as the “Law of the Hammer”) is a cognitive bias coined by Abraham Maslow to rely too heavily on familiar tools or processes instead of looking for new or alternative ways to accomplish tasks. This could be seen in individuals that write memos in Microsoft Notepad (because they know how to use Notepad), that could produce more comprehensive messages by learning how to use Microsoft Word. As intelligence analysts, it is natural to depend on past knowledge, skills, and abilities to develop analysis and reporting. However, when available, it is critical to take advantage of new and innovative approaches to increase the quality and efficiency of analysis and reporting strategies.


Focus on what you want to achieve.

Do the work to determine your projected goals. Frame your actions by asking yourself: What do I want to accomplish? Are there any time constraints? Is there a better way to do this? It will help to push you in the direction of not reverting back to older methods of doing things.

Foster an environment of creativity.

A team that embraces and encourages diverse thought is never afraid of finding new ways to solve issues. Participate in brainstorming sessions, and discussions that allow others to think critically. Be brave in the process to mitigate biases by developing alternative and competing ideas.

Experiment with new SAT strategies.

SATs, such as Analysis of Competing Hypotheses (ACH), are very effective in defeating the “Law of the Hammer.” Check out the [CIA Tradecraft Primer](#) for more ideas to improve your intelligence analysis and reporting. 

DEAD DROP



1140 N. Colombo Ave
Sierra Vista, AZ 85635
(520) 458-8278
(520) 626-2422 from Tucson
azcast.arizona.edu



College of Applied
Science & Technology

