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#### THE UNIVERSITY OF ARIZONA

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**Managing Editor/Art Director: Charles Walker** 

Special Thanks to Our Contributors: Craig Nazareth, Dalal Alharthi, Angela Lucero

### ON THE COVER



The cover for our New Year Edition captures an image of surveillance data of a busy street in a densely populated urban area in the United States. It is commonly uses this type of surveillance as a monitoring and intelligence collection method for various needs. As technology advances, these surveillance platforms will be able to provide more effective biometric and facial detections to aid their needs. Photo: Adobe Stock



### Welcome Back, Students!

Happy New Year and welcome back from the holiday break! As we step into 2025, it's time to refocus and set our sights on the challenges and opportunities that lie ahead in the intelligence community. This new academic year is your chance to deepen your understanding, sharpen your skills, and engage with some of the most pressing topics in the field.

#### **Key Topics to Drive Your Thinking in 2025**

# 1. Countering Disinformation and Influence Operations

The proliferation of disinformation poses unique challenges to national security. Explore how intelligence professionals combat these threats while safeguarding democratic principles.

**Book Recommendation**: LikeWar: The Weaponization of Social Media by P.W. Singer and Emerson T. Brooking



### 2. The Evolving Cybersecurity Landscape

Cyber threats grow in sophistication and scale. Gain insight into strategies for protecting critical infrastructures and sensitive data.

**Book Recommendation**: Sandworm: A New Era of Cyberwar and the Hunt for the Kremlin's Most Dangerous Hackers by Andy Greenberg

# 3. Climate Change as a National Security Threat

Understand how environmental factors are reshaping global security dynamics and what it means for intelligence strategy.

**Book Recommendation**: All Hell Breaking Loose: The Pentagon's Perspective on Climate Change by Michael T. Klare

#### 4. Ethics and Bias in Intelligence Analysis

Reflect on the ethical dimensions of intelligence work and the importance of minimizing cognitive biases in decision-making.

**Book Recommendation**: The Psychology of Intelligence Analysis by Richards J. Heuer Jr.

### **Bringing In A Year of Growth and Exploration**

This year is an opportunity to challenge yourself and engage with complex, real-world issues. Your contributions, insights, and curiosity are invaluable as we explore these topics together. Let's make 2025 a year of growth, discovery, and academic excellence!

Welcome back and best wishes for the new year ahead!





# Speaker Series:

Debunking the Myths:

A Glimpse into the Realities of Intelligence Work

February 19th 4PM AZ Time

Register Here

Working in intelligence is often shrouded in mystery, leading to a plethora of myths and misconceptions about the profession. This lecture aims to separate fact from fiction, providing a realistic portrayal of the challenges, rewards, and realities of working in intelligence. We will debunk common myths, such as the notion that intelligence agencies are only interested in espionage. Instead, we will explore the complexities of work and discuss the realities of intelligence work in different organizations. By shedding light on the myths and realities of working in intelligence, this lecture aims to provide a more accurate understanding of the profession and inspire students to consider a career in intelligence.

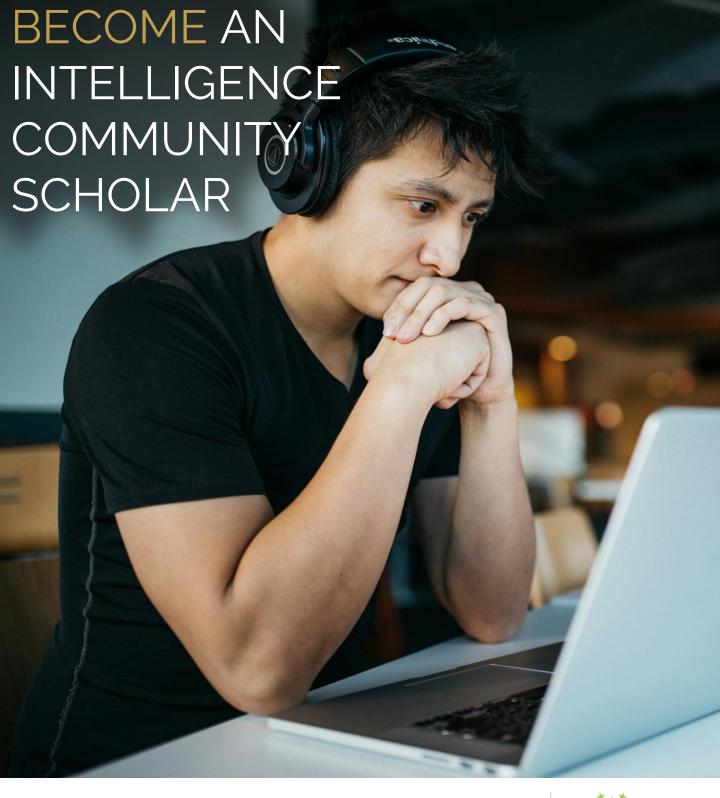


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Director of Innovation for the Cyber Convergence Center (C3) at the University of Arizona: Marnie Vance is a visionary leader in multi-domain innovation with over 34 years of experience as an intelligence professional. Throughout her distinguished career, she has served in various military and civilian positions within the U.S. Army. Pioneering a Path in Joint Operation, she served on a joint mission aboard the USS Dwight D. Eisenhower, a landmark deployment as it was one of the first combat ships to integrate women. Notably, she spearheaded the creation of the Army's first hybrid Cyber Intelligence teams while serving as the senior intelligence analyst supporting Cyber Operations for a global command of 15,000 personnel. Mrs. Vance brings a wealth of expertise in intelligence prototype development and modeling & simulation, having dedicated 13 years to supporting DoD capability development. She has extensive experience fostering international collaboration, having played a key role in intelligence interoperability efforts with the ABCANZ Armies' Programs (American, British, Canadian, Australian, and New Zealand.) During her career, Mrs. Vance also spent five years as a field software engineer and software tester for C5ISR systems, demonstrating a well-rounded understanding of the technical aspects of intelligence analysis. A retired U.S. Army Intelligence Analyst and Knowlton award recipient, Mrs. Vance holds a B.S. in Occupational Education and is actively pursuing her graduate degree.













# 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.





estrellamountain.edu

eac.edu

### BENEFITS OF BEING AN IC SCHOLAR

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- 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



# student showcase

Applying intelligence tradecraft to answer a challenging intelligence question: China and Taiwan, and the prospect for war in the next 1-3 years.

Producing all-source intelligence requires analysts to incorporate information from all available sources, using analytical techniques and models of various types to communicate their intelligence findings. Depending on the intelligence needed, the models can take many forms. For example, analysts examining the Russo-Ukrainian conflict may use temporal or time-based models to discuss the timeline of hostilities. Analysts could also collect military unit strength data of tactical Ukrainian and Russian forces to compare how many tanks and personnel have been damaged during a specific time.

Intelligence product development, including generating the models that provide the overall framework of some intelligence topic or target, requires the analyst to employ analytical tradecraft (critical thinking, intellectual inquiry, and creativity are just a few of the components of tradecraft) to synthesize the most complex problems.

One of our top students in IIO, Wyatt Allen, tackled the issue of China and Taiwan using political and military modeling and analytical tradecraft that exemplifies the qualities of an intelligence analyst. Wyatt presents two political and military models that support his overall assessment concerning the prospect of a Chinese military invasion of Taiwan in the next 1-3 years.

Note: During the class, we use classification markings based on fictional reports provided to the students, so they can practice applying derivative classification to intelligence products. We removed the classification banners and markings for this publication.



WYATT
ALLEN
Student, IIO Program

# ASSESSMENT OF CHINA'S STRATEGIC INTERESTS CONCERNING TAIWAN

BY WYATT ALLEN & CRAIG NAZARETH



We assess that the People's Republic of China (PRC) is unlikely to invade Taiwan in the next 1-3 years due to Beijing's preference for employing all available means below the threshold of war (grey zone operations) in the near term while its military is undergoing modernization efforts. Beijing is also cautious of long-lasting economic fallout from a heavy-handed military effort while its country faces an economic crisis. Beijing's focus on grey zone operations allows it to address economic reforms while pursuing its military modernization goals. We judge that Beijing will employ all instruments of national power, including diplomatic, informational, military, and economic power, to pursue its national interests concerning Taiwan. This strategy allows Beijing to shape the strategic and operational environment to support its long-term goal of reunification with Taiwan by 2049. Beijing will likely continue to conduct military exercises and drills in response to what it perceives as "proindependence" events or rhetoric from Taipei and the United States. Beijing will almost certainly continue to promote the "One China" policy internationally, isolate Taipei diplomatically,

and use economic and informational tools to erode Taiwan's resolve while undermining Taiwan's alliances. These actions are consistent with Beijing's goal of eventual reunification without triggering a direct military confrontation in the near term.

We have moderate confidence in this assessment based on credible open-source and human intelligence (HUMINT) reporting. However, this assessment is supported by two key assumptions; we assume that the Chinese Communist Party (CCP) leaders will not risk compromising their long-term strategic goals through premature or poorly calculated military action. We also assume that Beijing intends to develop the PLA's capabilities as a primary deterrence to US and allied intervention in China's regional affairs and to compel Taipei, if necessary, to negotiate in favor of unification before 2049. However, Beijing will refrain from initiating an invasion if it perceives a significant risk of a drawn-out conflict with the U.S. it cannot win decisively.

Alternatively, Beijing may conduct a blockade

Figure 1: Political Target Model 1 – PRC Political - Military Responses to Taiwan "Pro-Independence" Activities, 2022-2024

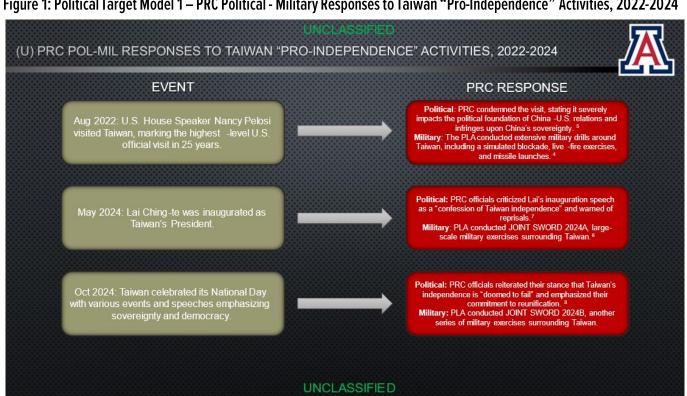
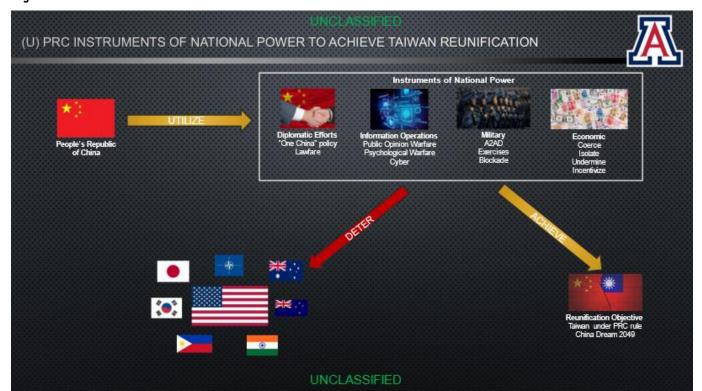


Figure 2: Model 2 - PRC Instruments of National Power to Achieve Taiwan Reunification



of Taiwan within the next 1-3 years, similar to the blockades during the U.S. House Speaker's visit in 2022 and China's Joint Sword exercises in 2024, except the PLA will sustain the blockade indefinitely. This strategy would pressure Taipei to capitulate or face severe economic ruin and potential famine. This course of action could seek to force Taipei or Washington to "strike first" to break the blockade, allowing Beijing to shape the international narrative. This scenario is plausible based on observed PLA exercises, Beijing's historical use of coercive strategies, and its consistent rhetoric regarding Taiwan's reunification.4 Our first political-military target model (Figure 1) highlights events that have triggered PRC responses, underscoring the PRC's use of all instruments of power and increasingly using military capabilities to showcase the results of its ongoing modernization as a deterrent to further provocations and as a means to test specific capabilities.

Our second political-military model (Figure 2) demonstrates Beijing's preference for using all possible options, short of war, to achieve its

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interests. Note that China's strategic goal is unification with Taiwan while deterring Western allies and Taiwan from pursuing measures that support Taiwan's independence.

# The People's Republic of China's Military Capability Assessment

The PRC will continue developing its Anti-Access/Area Denial (A2/AD) strategy beyond the First Island Chain in the next 1-3 years. The A2/AD strategy is Beijing's primary military capability to deter U.S. and allied military intervention while coercing Taiwan toward unification.

A2/AD integrates long-range precision strike systems (e.g., DF-21D "carrier killer" missiles), advanced air defense systems (e.g., HQ-9 and S-400), and a robust naval presence, including nuclear submarines, to secure control over the Taiwan Strait and surrounding waters. These capabilities are further augmented by cyber and information warfare capabilities, which aim to target Taiwan's critical infrastructure and

public confidence. The Joint Sword exercises in 2024 reinforced <u>A2/AD</u> posturing, demonstrating the PLA's ability to enforce a blockade or escalate without initiating direct conflict.

Our first military target model (Figure 1) demonstrates China's A2/AD posture and prioritization of deployment to support its strategic goals. Note that China's reach using military capabilities expands beyond the second island chain, which consists of the U.S. territory of Guam (Figure 3).

Our second military model (Figure 2) demonstrates China's prioritization of A2/AD while pursuing military modernization to attain capabilities essential to any future invasion of

Taiwan. In the third column, we highlighted two critical components of capability using the Capability Based Assessment, or CBA planning model ((Figure 4), which defines military capability as a function of doctrine, organization, training, materiel, leadership, personnel, and facilities needed to achieve and sustain the capability Institute for Defense Analyses, 2019). This form of detailed analysis identifies information gaps. It helps analysts quantify and qualify the capability regarding the actual performance standard and purpose, which are essential to effective defense planning and response.

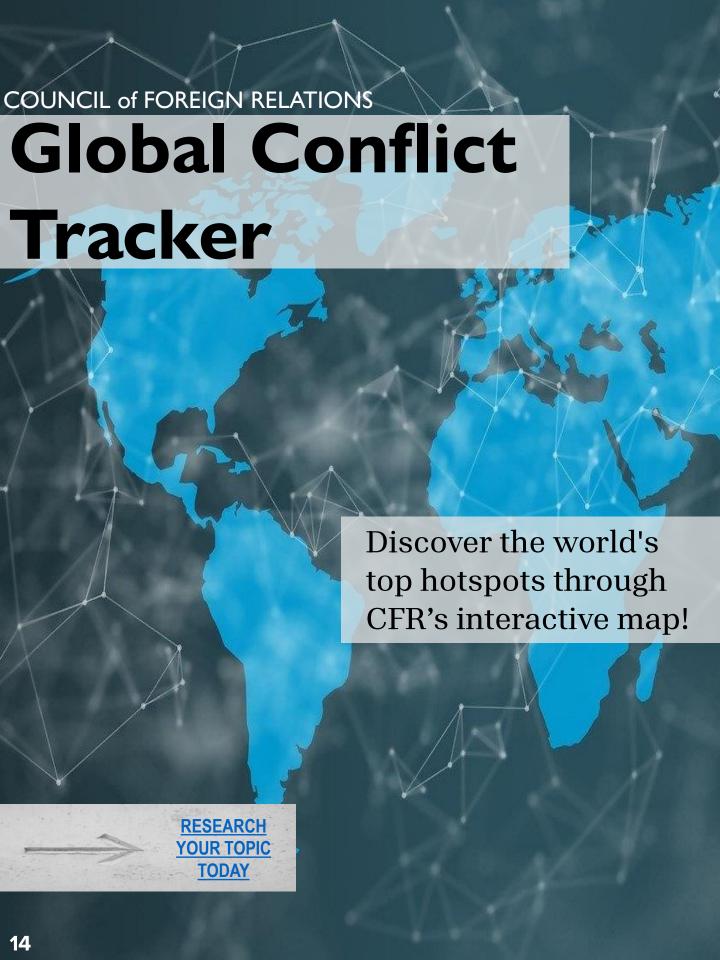
We thank Wyatt for allowing us to showcase his work and hope you gained some insights into the intelligence production process.



Figure 3: China A2/AD Capabilities, Source: CSBA

Figure 4: Capability-Based Assessment of PRC Defense Capabilities

Ability	Performance Standard	Why This Capability?	DOTMLPF Assessment
A2AD to Second Island Chain	The PRC must maintain layered defense systems capable of deterring or delaying U.S. forces from intervening beyond the First Island Chain.	Driven by the need to counter U.S. force projection, ensure control over critical maritime routes, and expand operational reach to achieve regional hegemony.	Materiel: Advanced missile systems like DF-26 and naval assets are critical for extended reach.  Doctrine: Clear operational guidelines and TTPs to coordinate multi-domain precision warfare across large geographical distances.
Defense of Roll-on/Roll- off vessels	Ensure safe transit and operational readiness of roll-on/roll-off vessels to enable an invasion of Taiwan.	Driven by the necessity of sustaining amphibious assault forces, mitigating vulnerabilities in logistics chains, and	Materiel: Development and integration of counter-unmanned systems (e.g., electronic warfare, directed energy weapons).
		countering the growing threat of unmanned assets (UAVs, USVs, UUVs) that can disrupt maritime operations.	<b>Training:</b> Conducting regular joint exercises to simulate defense against unmanned threats and improving crew proficiency in operating counterunmanned systems.



# SOLVE THIS CRYPTOGRAM

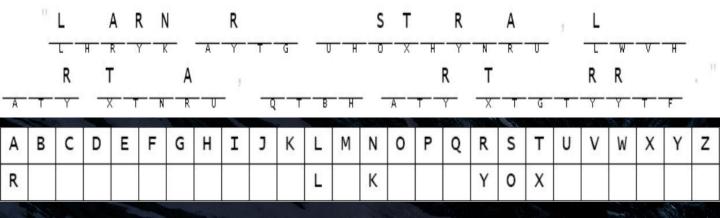
"LHRYK AYTG

UHOXHYNRU LWVH

ATY XTNRU QTBH

ATY XTGTYYTF."

- Albert Einstein





From the unprecedented hurricane-induced flooding of New Orleans, LA to the increased wildfires recently experienced in Los Angeles, CA, the effects of climate change are more than an environmental issue—it's a severe national security challenge that affects critical infrastructure, global stability, and military readiness. Rising temperatures, extreme weather events, and rising sea levels aren't just natural phenomena; they intensify geopolitical tensions and destabilize vulnerable regions. As natural disasters grow more frequent and severe, they strain emergency response systems, disrupt supply chains, and threaten essential infrastructure like energy grids, transportation networks, and water supplies.

The U.S. military, which often plays a key role in disaster response, also feels the effects. Coastal bases face increasing risks from flooding while shifting climate patterns complicate training schedules and operations. Climate change-driven scarcity of resources like water and food creates additional conflicts and forces mass migrations in already fragile areas, placing extra pressure on U.S. diplomatic and defense efforts.

To tackle these challenges, we need a comprehensive approach. This means integrating climate resilience into military plans, reducing global emissions, and working with other nations to manage climate-related instability. By fully recognizing the security risks of climate change, the U.S. can better prepare for a future where environmental issues play a central role in maintaining global stability.

#### **DIVE DEEPER**

U.S. Department of State "Climate Change as a
National Security
Challenge"

Columbia University - Why Climate Change Is A National Security Risk

<u>Department of Defense -</u> <u>Tackling the Climate Crisis</u>

U.S. Government
Accountability Office National Security Snapshot
- Climate Change Risks to
National Security

U.S. Homeland Security -Addressing Climate Change

RAND - Climate Security Is National Security

The Nation: Climate
Change Is The Real
National Security Threat

Emory Law: Climatizing National Security

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CIA and U.S. Intelligence Community Tapped to Fight U.S. Fentanyl Crisis

During a conference to support the CSIS
Aerospace Security Project,
National Security Advisor
Jake Sullivan reported that
"Russia is developing a new satellite carrying a nuclear device." Although it is not an immediate threat due to not being a currently deployed Russian asset, it still holds weight as a potential security threat to the global space satellite system.

Sullivan's remarks followed a United Nations Security Council vote on a resolution, introduced jointly by the United States and Japan, on Preventing Nuclear Weapons in Space. CSIS



CIA Seeks to Tackle U.S. Fentanyl Crisis

Senior CIA intelligence officials hope to fight the effects of the U.S. fentanyl crisis by advocating for reauthorizing Section 702 of the Foreign Intelligence Surveillance Act of 1978, which authorizes officials to conduct warrantless eavesdropping on foreigners overseas.

CIA aims to focus intelligence collection allowed under Section 702 to impede transnational organized crime groups that manufacture, funnel, and transport fentanyl and other synthetic opioids from China to Mexico and into the U.S., killing tens of thousands of U.S. citizens every year. USA Today



New Intelligence
Authorization Act Released
to Advance Workforce and
Technology Provisions

2025 Intelligence
Authorization Act was
approved to expand key
areas in workforce
geospatial technologies,
polygraph and clearance
screening data, Al, and
biotechnology to bolster
protections against
foreign adversaries.

These new authorizations were included in the final version of the 2025 National Defense Authorization Act, which prioritizes funding to optimize continuing programs necessary to protect national security interests. Federal News Network

# INTEL IMMEMORIAL

Moments in U.S. Intelligence community history

# 1960 U-2 SPY PLANE INCIDENT

# THE CHILLING EFFECTS OF SPYCRAFT

The U-2 spy plane Incident of 1960 marked a turning point in Cold War espionage and had lasting implications for U.S. intelligence. On May 1, 1960, Francis Gary Powers, piloting a U-2 spy plane, was shot down over Soviet airspace during a high-altitude reconnaissance mission. The U-2 was designed to operate beyond the reach of Soviet defenses, gathering critical intelligence on military installations and nuclear developments. However, Soviet surface-to-air missiles successfully downed the aircraft, and Powers was captured alive.

Initially, the U.S. government denied the plane's espionage mission, claiming it was conducting weather research. The Soviet Union, however, revealed that they had recovered both Powers and the plane's wreckage, including photographic evidence of its surveillance purpose. The incident led to the cancellation of a scheduled U.S.-Soviet summit, halting potential diplomatic progress and intensifying Cold War hostilities.

The U-2 Incident played a critical role in intelligence in national security and exposed the vulnerabilities of reconnaissance technology. Underscoring the risks of espionage in a highly polarized world, it influenced future developments in intelligence-gathering methods, such as the reliance on satellite surveillance (and recently drones) to minimize the risk of human casualties and international incidents. It also highlighted the importance of transparency and effective strategic communication to manage public and international perceptions of intelligence activities.



Francis Gary Powers was holding a U-2 model during Senate Armed Services Select Committee hearing on 1960 U-2 spy plane incident. (Public Domain)



Surveillance route taken by the U-2 spy plane shot down by the Soviets in 1960 (Public Domain)



### **Confirm Your Assigned Academic Advisor**

Knowing whom you can contact for support is essential whether you're a newly admitted or continuing student. Continuing students, your academic advisor may have changed from the one you worked with in previous semesters. To check who your assigned advisor is, follow the steps below!

- 1. Log into your Student Center portal on the UAccess webpage.
- 2. Click on the Advising menu option at the top of the page and select "View Advisors," or follow the links below to find your appropriate Advisor.

ADVISORS

CERTIFICATE ADVISORS

3. You will see your current advisor's name, their contact information, and a link to schedule an appointment.

### **Confirm Your Enrollment**

Please log into your <u>UAccess Student Center</u> and confirm your enrollment. If you have holds, you are unsure about or questions about the courses you're enrolled in or are not currently enrolled in, <u>reach out to your Advisor</u>.

Please feel free to contact our main number at 520-621-8219 and email address at <a href="mailto:CASTAdvising@arizona.edu">CASTAdvising@arizona.edu</a>

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# **COURSE SCHEDULE**

# SPRING 2025

### **SEVEN WEEK - FIRST**

SEVEN WEEK - FIRST				
CAT#	COURSE	<b>PROFESSOR</b>		
<b>BASV 314</b>	Mathematics for Applied Sciences	Stimson, Tierra		
CYBV329	Cyber Ethics	Straight, Ryan		
CYBV354*	Principles of Open-Source Intelligence	Hetherington, Cynthia McCary, John		
CYBV437*	Deception, Counter-Deception & Counterintelligence	Graff, Jared		
CYBV450	Information Warfare	Giordano, Joseph		
GPSV301	American Political Ideas	Lutes, Todd		
INTV305	Introduction to IIO	Allen, Brent		
INTV326	Introductory Methods of Intelligence Analysis	Phillippi, Emilee		
INTV350	Intelligence Collection	Nazareth, Craig Galbraith, Lachlan		
INTV353	Geospatial Intelligence	Zsambok, Billy		
INTV459	Intelligence, Surveillance, and Reconnaissance Synchronization	Wisecup, Tyler		
SEVEN WEEK - S	ECOND			
	Signals Intelligence and			
CYBV351*	Electronic Warfare	Cota, Casey		
CYBV354*	Principles of Open-Source Intelligence	McCary, John		
CYBV450	Information Warfare	Giordano, Joseph		
INTV305	Introduction to IIO	Allen, Brent		
INTV326	Introductory Methods of Intelligence Analysis	Phillippi, Emilee		
INTV350	Intelligence Collection	Galbraith, Lachlan		
INTV377	Psychological Operations	Longley, Carrick		
INTV455	Target-Centric Analysis	Nazareth, Craig		
INTV459	Intelligence, Surveillance, and Reconnaissance Synchronization	Wisecup, Tyler		
15 WEEK INTV498 Senior Capstone in IIO (Section 101) Nazareth, Craig				
INTV498	Senior Capstone in IIO (Section 103)	Nazareth, Craig		
* Courses offered as electives 21				

# PROGRAM CORES

# **BASV 314**

# **Mathematics for Applied Sciences**

# Spring 2025, Seven Week – First

This course will examine applications of probability, statistics, data analysis, hypothesis testing, apportionment, and scheduling to the applied sciences.

# **CYBV 329**

# **Cyber Ethics**

### Spring 2025, Seven Week – First & Second

A sustained study of ethical issues concerning employment in the public and private sectors, including allocation of resources, corporate and social responsibility, relationships, and discrimination. This course is a designated writing emphasis course. This course emphasizes the ethical and legal standards governing information technology. New technology creates ethical challenges for individuals around the globe, which applies to most persons regardless of whether they are employed in the information technology field or a more traditional occupation.

# **CYBV 450**

# **Information Warfare**

## Spring 2025, Seven Week – First & Second

CYBV 450 will give students an in-depth overview of the tactics, techniques, procedures, and tools used to conduct and defend against Information Operation campaigns. Students will analyze case studies involving nation-state actors' online influence efforts to detect, deconstruct, and counter adversarial Information Operation campaigns.

# **ENGV 306**

# **Advanced Composition**

### **Closed - TBD**

This course will examine applications of probability, statistics, data analysis, hypothesis testing, apportionment, and scheduling to the applied sciences.



# **GPSV 301**

# **American Political Ideas**

Spring 2025, Seven Week – First

(AZ Online) This course examines American political ideas from colonial times to the present.

# **INTV 305**

# Introduction to Intelligence and Information Operations

# Spring 2025, Seven Week – First & Second

Provides a broad overview of the American intelligence systems – collection, analysis, counterintelligence, and covert operations – and demonstrates how these systems work together to provide a "decision advantage" for policymakers. Students will also learn how U.S. adversaries have shifted away from directly challenging American forces and have moved to a less risky hybrid warfare model to achieve their tactical and strategic goals. Students will use a combination of research and critical thinking exercises to understand the importance of how intelligence is used to inform the decision-making process. Students will also learn to detect and guard against adversarial information operations that manipulate their sources.

# **INTV 326**

# **Introductory Methods of Intelligence Analysis**

# Spring 2025, Seven Week – First & Second

Provides students with an introduction to Intelligence Analysis and instruction on how to research national security topics and incorporate tradecraft, including critical thinking and structured analytic techniques, to challenge judgments, identify mental mindsets, stimulate creativity, and manage uncertainty within the framework of providing sound assessments to decision-makers at the Strategic, Operational and Tactical level of war. Students will use scenario-based exercises to practice employing structured and analytical techniques to answer a decision-maker's critical information requirements.

# **INTV 350**

# **Intelligence Collection**

# Spring 2025, Seven Week – First & Second

This course provides students with an overview of the five U.S. intelligence Community recognized intelligence disciplines (Signals Intelligence (SIGINT), Human Intelligence (HUMINT), Geospatial Intelligence (GEOINT), Measurement and Signatures Intelligence (MASINT), and Open Source Intelligence (OSINT) to understand how to employ collection to answer information and intelligence requirements into the capabilities, limitations and applications of sensors, and discern the functional responsibilities between intelligence analysts, collection managers and decision makers across the national security enterprise.

# **INTV 459**

# Intelligence, Surveillance, Reconnaissance & Synchronization Spring 2025, Seven Week - First & Second

This course provides an in-depth examination of optimizing the coordination of all available collection capabilities to support intelligence operations and the military decision-making process. Students will research and engage in practical exercises to determine optimal sensor deployment schemes and sensor-to-target mix to address different collection requirements.

# **INTV 498**

# Senior Capstone in Intelligence and Information Operations Spring 2025, 15 Week (Sections 101 & 103)

This course provides Intelligence & Information Operations majors with a capstone experience emphasizing integrating knowledge acquired in previous classes. The course provides a culminating experience for majors involving a substantive project that demonstrates a synthesis of learning accumulated in the major, including broadly comprehensive knowledge of the discipline and its methodologies. Students are required to incorporate a field research study into their research project. This is a self-directed course where students develop and produce a senior-level research paper grounded in relevant research.

# **ELECTIVES**

# **CYBV 351**

# Signals Intelligence and Electronic Warfare

Spring 2025, Seven Week - Second

CYBV 351 is an elective course that will provide students with an in-depth look at Signals Intelligence (SIGINT) and Electronic Warfare (EW) from a strategic, operational, tactical, and technological aspect, including the role of electromagnetic energy in SIGINT and EW operations. Students will use a combination of assessments, research, and practical exercises to gain a holistic view of SIGINT and EW applications in the National Intelligence Enterprise.

# **CYBV 354**

# **Principles of Open-Source Intelligence (OSINT)**

### Spring 2025, Seven Week – First & Second

CYBV 354 provides students with an overview of the fundamentals of Open-Source Intelligence. Students will be presented with the most effective methodologies cyber professionals, law enforcement, and other investigative personnel use to locate and analyze information on the Internet and the Dark Web. Students will use interactive exercises to become familiar with the volume of sensitive data on the Internet and how it can be exploited to develop highly detailed intelligence products.

# **CYBV 437**

# **Deception, Counter-Deception & Counter-Intelligence**

# Spring 2025, Seven Week - First

CYBV437 will introduce students to deception, counter-deception, counterintelligence, and psychological operations. A survey will be presented on how these concepts are used in adversarial Information Operations and why they are among the most effective mechanisms to sway public opinion. Students will use interactive exercises to become familiar with detecting deception campaigns and the mitigation strategies to defend against them.

# **INTV 353**

# Introductory Methods of Geospatial Intelligence (GEOINT) Spring 2025, Seven Week – First

This course introduces students to GEOINT operations and how intelligence professionals can incorporate tradecraft and technology to present visual depictions of critical information regarding enemy forces and terrain and provide combat operations support to decision-makers and operations planners. This course studies the electromagnetic spectrum and fundamentals of energy propagation about GEOINT systems and phenomenology. Students will be introduced to the tasking, collection, processing, exploitation, and dissemination of GEOINT systems, data, and GEOINT contributions to national security, homeland security, and strategic partnerships. This fundamental knowledge may be applied to a diverse range of constantly evolving GEOINT efforts, including support for disaster relief, force protection, and combat operations.

# **INTV 377**

# **Psychological Operations**

# Spring 2025, Seven Week – Second

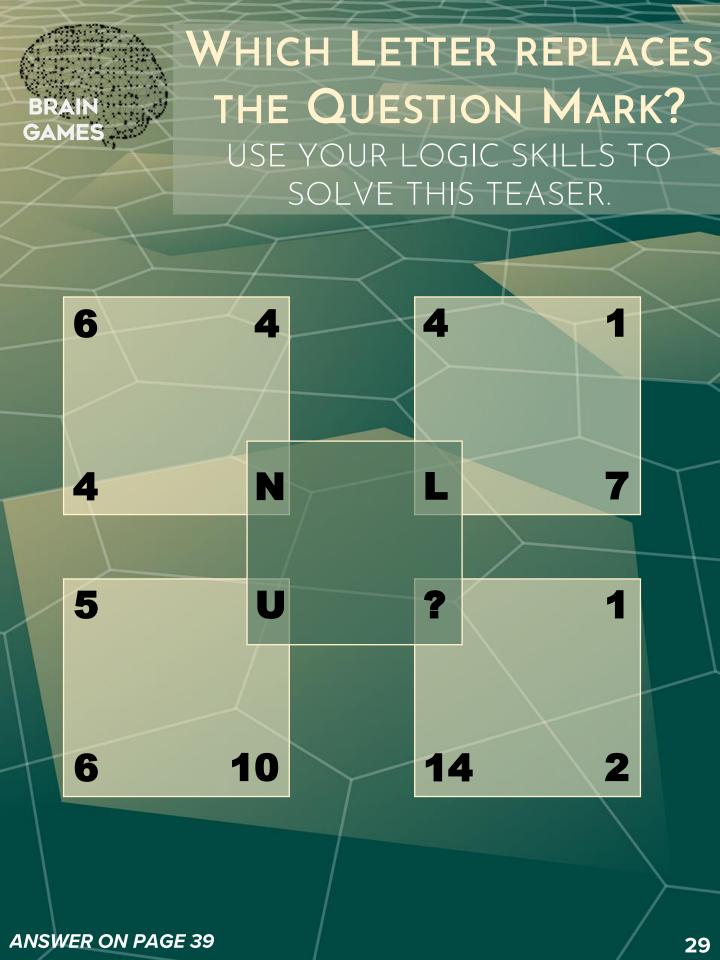
This course is an introduction to the capabilities and uses of psychological operations. Students will examine psychological operations' capabilities, limitations, history, and challenges. As part of their learning experience, students will establish when psychological operations are appropriate, how to know when they have become the target of an effort to manipulate their behavior, how to mitigate their effects, and how to plan a psychological operation against a notional target. Enrollment Requirements: Students enrolled in fully online programs only.



# **Target-Centric Analysis**

Spring 2025, Seven Week – Second

This course provides students with an in-depth analysis of the intelligence process, methodologies for evaluating data, threat modeling, and a process to evaluate the needs of the Intelligence consumer. Students will utilize practical analysis exercises to become familiar with threat modeling, the estimative process, and Intelligence reporting techniques to answer a decision maker's critical information requirements.







# INTELLIGENCE & NATIONAL SECURITY SUMMIT

September 18-19, 2025

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National Harbor, MD

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**GLOBAL CHALLENGES** 

intelsummit.org



# **United States Intelligence Community** Internship Opportunities for Students

To learn more, visit www.IntelligenceCareers.gov/ICStudents.html or individual IC element websites linked below



#### NATIONAL RECONNAISSANCE OFFICE

#### www.nro.gov/careers/

- Application open until July 24th, 2022 with selections typically made by October
- Paid undergraduate and graduate internship programs for summer 2023

#### Specific programs of interest include:

- STEM
- Business
- Economics
- Administration
- Human Resources
  - Physical Science
- Political Science
   Data Science



#### DEPARTMENT OF HOMELAND SECURITY

https://www.dhs.gov/homeland-securitycareers/office-intelligence-and-analysis-Internship-program

- Application open from July 2022 to August 2022
- Paid undergraduate and graduate internship programs for summer 2023

#### Specific programs of interest include:

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



#### AIR FORCE INTELLIGENCE

https://afciviliancareers.com/pag-intel/

- Applications are currently being accepted and are accepted at various times during the year.
- Paid undergraduate and graduate 3-year internship

An internship in the Intelligence Community (IC) is a great experience that can help launch your career path. Many of the opportunities highlighted here are for summer internships, but some IC elements offer internships during the academic year or that could span many years. Upon graduation and successful completion, some internships lead to non-competitive conversion to full-time employment



#### DEFENSE INTELLIGENCE AGENCY

https://www.dia.mil/Careers-Opportunities/Students/

- Application opens and closes at various times, typically in March the year before your internship begins
- Paid undergraduate & graduate internship. programs for summer 2024

#### Specific programs of interest include:

· Political Science · Business

Computer

Science

- Global Studies
  - Human Resources
  - Law/Criminal Justice
- Natural Sciences
- Engineering
- Logistics



#### OFFICE OF NAVAL INTELLIGENCE

www.oni.navv.mil/Careers/Intern-Programs/

- Application open from September 2022 to October 2022
- Paid undergraduate and graduate internship programs for summer 2024



#### NATIONAL SECURITY AGENCY

www.intelligencecareers.gov/nsa/nsastude

- Application open from September 2022 to October 2022
- Paid undergraduate and graduate internship programs for summer 2023

#### Specific programs of interest include:

- STEM
- Information.
- Computer Science
- Management
- Information. Technology

- Foreign Language
- Human
- Research/

- · Logistics
- Resources
- Development

- Cyber Security
- Strategic.
- Intelligence Analysis Communications





Diversity. Knowledge. Excellence.

# **United States Intelligence Community Internship Opportunities for Students**

To learn more, visit www.IntelligenceCareers.gov/ICStudents.html or individual IC element websites linked below



#### Virtual Student Federal Service (VSFS)

https://vsfs.state.gov/apply

- Apply in July 2022 for an internship during the upcoming academic year
- VSFS is an unpaid, remote internship which requires no security clearance



### The Presidential Management Fellowship (PMF)

www.pmf.gov

- The application is open from 13 September until 27 September
- Only graduate students (MA, PhD, JD, MBA, etc) who graduated between September 13, 2020, and September 13, 2022, or will graduate before August 31, 2023, may apply.
- Selected PMFs will have the opportunity to apply to positions across the federal government, including within the IC



#### CENTRAL INTELLIGENCE AGENCY

https://www.cla.gov/careers/studentprograms/

- Applications accepted year-round for most programs: apply one year before preferred start date
- Paid undergraduate and graduate internship

### Specific programs of interest include:

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





#### DEPARTMENT OF STATE

https://careers.state.gov/internsfellows/student-internships/

- Application opens in the fall on USA Jobs (typically opens and closes in September)
- Paid undergraduate and graduate internship for summer 2023.
- · Positions in many bureaus, including the Bureau of Intelligence and Research (INR)

#### 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
- Workforce Recruitment Program for disabled persons



#### NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY

https://www.intelligencecareers.gov/NGA/n gastudentprograms.html

- Application closes in September 2022.
- Paid undergraduate and graduate internship. programs for summer 2023
- Positions based in Virginia & Missouri

#### Specific programs of interest include:

- Business
- Intelligence
- Finance

- Geophysics
- Analysis. Human Resources: • STEM.
- Computer Science Social Sciences.

- Earth Sciences
- Geography

#### FEDERAL BUREAU OF INVESTIGATION

www.fbijobs.gov/students

- Application opens in September 2022
- Paid undergraduate and graduate internship. programs for summer 2023
- Internships offered in Washington DC as well as at many of the FBI's field offices across the country

#### Specific programs of interest include:

- Honors Internship Program
- Visiting Scientist Program.





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#### The Department of Energy

www.energy.gov/careers/student-recentgraduates

Three internship programs of interest:

- Minority Educational Institution Student Partnership Program (MEISSPP)- Typically apply by March for a paid internship. Learn More.
- DOE Scholars Program- Typically apply by September for this internship with opportunities around the country as well as a stipend. Learn More.
- National Nuclear Security Administration Graduate Fellowship Program (NGFP)-Apply by Early October 2022 for this paid opportunity. Learn More.



#### U.S. Army Cyber Command

https://bit.ly/3nU0JEw

- Applications are currently being accepted and are accepted at various times during the year.
- Apply for paid positions over the summer or for 2-year fellowship opportunities
- · Positions located at Fort Gordon, Georgia



# Tips on Securing an Internship

- 1. Read the eligibility requirements before applying to ensure that you are eligible for the internship.
- 2. Write a federal resume. Work with your university career office and your IC CAE Program to understand the content required for a toptier federal resume.
- 3. If an application requires a cover letter, tailor it to the position. This is your opportunity to connect your education and unique experience and skills to the position.
- 4. Be proactive and move quickly. Check often for internship openings as some agencies cap the number of applications they will accept.
- A background investigation is typically required and some agencies also require a medical exam, foreign language, and/or military service.





# STUDENT PROGRAMS & INTERNSHIPS







# GOVERNMENT / IC - AFFILIATED

Central Intelligence Agency Student Programs

**Defense Intelligence Agency Careers and Opportunities** 

**Department of Defense Civilian Careers Internships** 

Department of Homeland Security Internship Program

Federal Bureau of Investigations Internship Program

National Geospatial-Intelligence Agency Student Opportunities

National Security Agency Student Programs

State Department Student Internship Program

**UN Refugee Agency Internships** 

**USAID Careers** 

U.S. Commission on Security and Cooperation in Europe Max Kampelman

**Fellowships** 

White House Council of Economic Advisors Internships Opportunities





### INDEPENDENT

American Enterprise Institute Internships
Boren Awards
CATO Institute Internship Program
Center for Global Development Careers and Fellowships
Center for Immigration Studies Internship Program
Center for Strategic and International Studies Internships
Council on Foreign Relations Internships
In Roads Internship Program
Migration Policy Institute Internship Program
Organization of American States Internship Program
U.S. Institute for Peace Research Program
Wilson Center Internships



### Intelligence Analyst Internship

New Haven, CT or Remote

#### Description

Founded by a small team of intelligence analysts, SafeAbroad is a security consulting firm delivering intuitive intelligence and risk management solutions to our clients in the international education field. We have a startup mindset and thrive on the ingenuity of analytical thinkers. We are seeking candidates for the Intelligence Analyst (Intern) position to help us deliver actionable intelligence, risk, and safety reports to our clients. Intelligence analyst interns are expected to contribute 8-10 hours per week. The analyst shall perform the following duties:

- Enhance a data-driven risk framework to evaluate international safety concerns that have the ability to
  impact travelers abroad, particularly American students. Identify sources that publish open-source data on
  international risks (including but not limited to crime statistics, indicators of civil unrest/protests,
  infrastructure reliability, transportation safety, threat of terrorism, and sentiment towards Americans).
- Conduct country-level research and draft reports that highlight the area's primary safety risks to students abroad.
- Establish travel safety best practices, risk mitigation strategies, and incorporate new concepts into predeparture guidance materials.
- Monitor news feeds and open sources for worldwide incidents that could potentially impact the safety of travelers.
- Administrative tasks, research projects, and other duties as assigned.

#### Requirem ents

- Minimum 3.0/4.0 overall GPA
- 15+ credits completed in a degree program related to national security, intelligence studies, international relations, regional or global studies, risk management, political science, journalism, social sciences, criminal justice, or information/data sciences
- Experience locating authoritative studies, reports, and databases published by the United Nations,
   World Health Organization, INTERPOL, and other international sources
- Experience researching foreign countries in-depth and preparing culturally sensitive written reports
- Strong command of analytic writing with the ability to convey complex information concisely and eloquently
- Strong internet research skills with advanced literacy of PowerPoint, Word, and Excel or GSuite
- Ability to manage multiple tasks and communicate project status reports to management

#### To Apply

Please send your resume to Recruitment@SafeAbroad.org with the Subject: "Intelligence Analyst Internship"





CBP seeks high-performing University of Arizona students in the Intelligence Information and Operations (IIO) Program to seasonally support the Southern Border Intelligence Center (SBIC).

Students will assist the Executive Director in coordinating meetings, compiling deliverables, engaging with other senior leaders across the southern border, and conducting tasks as needed. This position allows selected candidate(s) to participate in intelligence planning at various strategic and operational support levels across the U.S. Government. Read more on the details on the next page.

### **Purpose of the Internship:**

Selected applicants will have the unique opportunity to delve into intelligence. They will learn how to conduct research, form analytical conclusions, make critical judgments, and perform a variety of analytical techniques to answer key intelligence questions. The internship will provide a comprehensive understanding of the intelligence cycle, Intelligence Community Standards, and the complex border security environment.

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

**Deadlines:** To ensure your application is considered, please note that applications must be received by the first week of the previous semester. For example, if you're interested in an internship starting in the Spring semester, please submit your 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 before employment to promote the agency's core values of vigilance,
  service to the country, and integrity. During the screening 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, with a minimum of 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;
- Assisting with the 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 <a href="mailto:lillian.abril@cbp.dhs.gov">lillian.abril@cbp.dhs.gov</a>.

### **Expected Contact:**

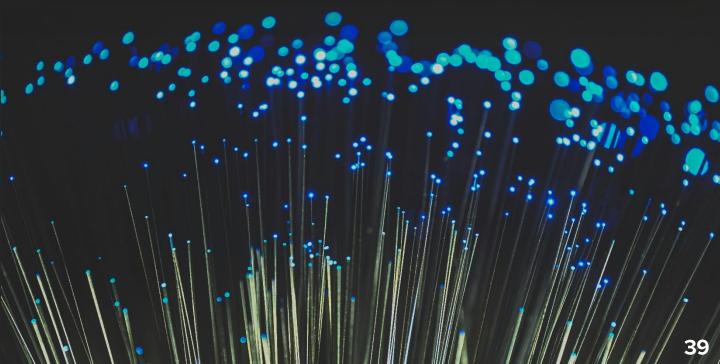
We will email you within 3-5 business days of receiving your application to set up an in-person interview.



# CIA Directorate of Analysis Fellows Program

Central Intelligence Agency (CIA) Directorate of Analysis offers fellowships for undergraduate and graduate students attending four-year Minority Serving Institutions (MSIs). As an Intelligence Analyst Intern for CIA, you will work on teams alongside full-time analysts, studying and evaluating information from all available sources—classified and unclassified—and then analyzing it to provide timely and objective assessments to customers such as the President, National Security Council, and other U.S. policymakers.

**Application Deadline:** 6-12 months before the intended start date. Follow here for more on this unique opportunity.





# CAREER RESOURCES

Industry employers, partners, contractors, and federal agencies are looking for the best candidates to fill many critical positions in the Intelligence Community. Find your new career using these trusted job search engines.

#### **U.S. Intelligence Careers**



Great resource to research iobs 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

#### Indeed



One of the most trusted job search engines in the nation! You will be able to find many 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

#### Clearancejobs/ Clearedjobs.net





Both sites offer pathways to employment for those students Clearance Jobs 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
- > clearediobs.net

#### **USAJOBS**

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

#### 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

Brain Games: Q

Albert Linstein

yesterday, live for today, hope for tomorrow.." – Solve This Cryptogram: Phrase: "Learn from

Puzzle Answers

# ii 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



# WE WANT Y U U FOR THE SOC

Join the UofA's Security Operations Center today for a rewarding, for credit, cybersecurity intern experience!

What Will You Do As A SOC Intern?

#### INVESTIGATION



Review vulnerability data, and record and track IT security incidents, including:

- Compromised Accounts
- Phishing
- Abuse reports

CORE OF THE INTERNSHIP

#### OPERATIONS



Get hands-on experience with security tools and practices within a professional business environment:

- SIEM
- IPS
- Netflow

EXPERIENCE THE SOC WORKFLOW

#### HUNTING



Perform threat hunting to detect and eradicate threats using various paid and open source intelligence tools!

LEARN AND JUSE DSINT SKILLS

This internship is available to be taken **for credit** with advisor approval and provides opportunities to develop your skills as a professional in the industry.

# Interested? Apply Now On Handshake:

https://app.joinhandshake.com/emp/jobs/8260025



# MINIMUM Qualifications



# PREFFERED Experience

- Located in Tucson, Arizona
- Access to reliable internet connection and computing resources
- Internship is available for credit — with advisor approval
- 15-25 hours per week
   Mon-Fri || 9a -> 5pm
- Must be a current UofA student studying Cyber Operations, Computer Science, or related degree

- The Incident Handling Process
- Networking (TCP/IP, UDP, DNS, DHCP, HTTP, etc.)
- Security technologies and concepts (Firewalls, Network Intrusion Detection systems, SIEM, CIA Triad)
- NIST Cybersecurity Framework
- Common data analysis tools and techniques
- Understanding of Information Security best practices at a individual and/or organizational level

Questions or concerns? Email: security@arizona.edu





**Neglect of probability** is a bias that occurs when individuals disregard or undervalue the likelihood of events, focusing instead on their emotional impact or other irrelevant factors. This cognitive bias can be particularly problematic for intelligence analysts, as it skews the assessment of threats, risks, and potential outcomes.

Neglect of probability biases can happen when individuals fail to weigh the likelihood of an event appropriately. For example, people often overestimate the risk of rare, dramatic events like terrorist attacks while underestimating the possibility of more common but less sensational threats, such as data breaches or insider threats. This skewed perception can lead to disproportionate resource allocation and misguided strategic decisions. An intelligence analyst's decisions often hinge on evaluating complex, uncertain scenarios. Analysts who neglect underlying probabilities may overreact to improbable but high-profile risks, dismiss plausible but less emotionally charged scenarios, or misallocate resources, focusing on unlikely events while ignoring more probable threats. Such misjudgments can lead to vulnerabilities in national security, organizational strategy, and operational planning.

Countering the effects of neglect of probability biases, intelligence analysts can adopt the following strategies:

- **1.Quantitative Frameworks for Decision-Making**: Use probabilistic models and statistical tools to evaluate risks objectively. By grounding decisions in data, analysts can mitigate the emotional pull of unlikely scenarios.
- **2.Scenario Analysis**: Consider multiple possible outcomes and their associated probabilities. Creating a range of "what-if" scenarios helps analysts focus on the spectrum of risks rather than fixating on one dramatic possibility.
- **3.Training and Awareness**: Regularly educate analysts about various cognitive biases, including ones affecting your abilities to inhibit critical thinking skills. Awareness training helps professionals recognize and counteract these tendencies in their assessments.

