

Fall Naval AI Summit

*The Naval Postgraduate School
& Office of Naval Research*



Hosted by the US Naval Academy

Col(ret) Randy Pugh and Dr. Jack Long
Annapolis, MD
23-26 September 2024

Post Summit Report



The 10th Naval AI Summit was a resounding success



The Fall 2024 Naval AI Summit brought together over 400 people in-person and virtually to share and learn about AI work being done across the DoD. This is significant growth from the first gathering in 2021 in which a dozen people got together and vowed to fix AI in the Navy and Marine Corps. **Feedback from attendees is that it was the best Summit to date.**

The focus of this summit was highlighting the bottom-up work being done across the DON and wider DOD. Highlighted work included USNA student internships, Army GenAI tools, projects at the Combatant Command and Service Chief level, as well as support to operational users across the world.

The summit provided a great opportunity for the growing community of AI practitioners across the DON and DOD to gather, share ideas, and build the linkages that drive cross-org collaboration.

Hope to see everyone at future events!

Key highlights

- **100+ attended for AI for Knuckledraggers**
- **400+ attended virtually and in-person**
- **CNO's analytic dashboards**
- **A history of Project Maven**
- **CyberCom and StratCom use of AI**
- **AI at Task Force 66**
- **Building the Naval AI workforce**

Take-Aways

- **Services are intelligently balancing research (long-term) and development (near-term)**
- **Services are deftly managing AI-related risk, speed, security, and ethical concerns**
- **Naval, Joint, and Coalition interoperability and integration is constantly considered**
- **DoN is behind Army & USAF, need AI Accelerator for people and use cases**
- **Need a shared database of AI-related Use Cases - ideas, problems, and best practices**
- **Need to charter and resource a 'central connector' to ensure continued progress**
- **Need a Naval AI Strategy**
- **Need to exponentially increase educating our workforce in AI**
- **Industry's AI leaders are strong and incredibly dedicated partners**
- **Everyone is committed to sharing and cooperating**
- **Need to continue improving data discipline and data sharing**
- **Need to go faster by focusing on high value add actions!**

Thank you to the United States Naval Academy for hosting the Fall 2024 Naval AI Summit!



Upcoming Naval Data and AI events



Spring 2025 AI Summit

24-27 March 2025

Naval Postgraduate School
Monterey, CA

POCs:

Dr. Jack Long john.g.long.mil@us.navy.mil

Randy Pugh rpugh@nps.edu

NWSI@nps.edu



Naval Information Warfare Center



NAML

24-27 February 2025

NIWC – Pacific
San Diego, CA

POCs: Dr. Katie Rainey
kate.e.rainey.civ@us.navy.mil
naml@us.navy.mil

Website: go.mil/naml

Flankspeed join code: mmyz6c4



Naval Information Warfare Center



ATLANTIC

Naval Data & AI Workshop

19-21 November 2024

NIWC – Atlantic
Charleston, SC

POC: Adam Tyson

adam.s.tyson.civ@us.navy.mil

navaldataandaiworkshop@us.navy.mil

[Data & AI Workshop](#)

DCOPE code: xzgbvce



Naval AI Hackathon

13-17 December 2024

Naval Postgraduate School
Monterey, CA

POC: Prof Mathias Kolsch

kolsch@nps.edu

AI NIX:

AI Naval Innovation Exchange



Program Overview



Purpose

The Navy and Marine Corps have a rapidly growing community of people working on Artificial Intelligence initiatives. These include a few driven top-down by the service headquarters but they are dwarfed by explosive growth in bottom-up efforts being devised across the Enterprise. The Naval AI Summit builds the defense AI ecosystem by providing an opportunity for AI practitioners from across DOD, academia, and industry to gather, share their work and experiences, and build connections for future collaboration

Objectives

The principal objective of the 2024 Fall Naval AI Summit is to facilitate Navy and Marine Corps cross-communication and the sharing of information, insights, and resources to the benefit of Naval AI practitioners and the overall DON-wide enterprise. The specific focus of this Summit is to better understand the use cases, solution ideas, successes, and challenges of those working to leverage AI for tactical purpose and advantage. As with the last summit in Quantico, VA, this summit’s proximity to the National Capital Region provides an excellent opportunity for senior leader engagement across the Navy, USMC, Joint Services, DOD, academia, and industry

Key Topics

- Vision for AI in the Naval Services
- AI at the leadership level
- Bottom-up driven AI
- Navy AI Task Force initiatives & updates
- Building AI capable warfighters
 - At the US Naval Academy
 - At the Naval Postgraduate School
- AI across the DOD:
 - XVIII Airborne Corps
 - Department of the Air Force
 - US Cyber Command
 - US Strategic Command
- Industry tools that can support the DoD
- Emerging threats
- Using AI to accomplish the mission:
 - Wargaming
 - Planning tools
 - AI ISO mission execution
 - Visualization
 - Aviation decision support
- AI use in the Ruso-Ukrainian War

End State

A Naval AI community connected and coordinated across all domains and commands collaboratively working actions that tackle some of the critical challenges impacting AI adoption across the Fleet



Fall 2024 AI Summit – Agenda



Day	Monday 23 September	Tuesday 24 September	Wednesday 25 September	Thursday 26 September
Morning	<ul style="list-style-type: none"> AI for Knuckledraggers 	<ul style="list-style-type: none"> USNA welcome (10m) Overview of AI (50m) Leadership dashboards (30m) The history of Maven (30m) CAIMANS (40m) 	<ul style="list-style-type: none"> SigInt AI (105 m) GenAI Challenges (25m) AI2C Overview (25m) Alfred (25m) 	<ul style="list-style-type: none"> IRIS and CITADEL (40m) CyberCom AI Task Force (40m) Raven Sentry (30m) Iron Bounce (30m)
Lunch	Open 1130-1300	Open 1145-1300	Open 1130-1300	Open 1120-1250
Afternoon	<ul style="list-style-type: none"> AI for Knuckledraggers 	<ul style="list-style-type: none"> PNPS remarks (10m) Dead Center (40m) CamoGPT (40m) CDAO USNA Interns (30m) LabelLogic / Ignition (30m) Report Modernization (30m) 	<ul style="list-style-type: none"> BMS (30m) Pioneer (30m) Dreamcatcher (30m) Harbinger (30m) Battering Ram (30m) USNA DS/AI Internships (30m) 	<ul style="list-style-type: none"> Kraken (35m) Emerging and Disruptive Threats (35m) TF Hopper (30m) ADAPT (25m) SMDII / PASS (25m) GenAI for Navy 2ks (30m)
Evening	<i>No host social at Fran O'Brien's</i>	<i>No host social at McGarvey's</i>	<i>No host social at The Choptank</i>	<i>Open / Travel</i>

Legend



Unclassified | **Classified** | Tentative



Fall AI Summit – Monday | 23 Sep

Legend
Unclassified | **Classified**



Timing	Topic	Lead / Speaker	Description
0800-1130 (210 min)	<i>AI for Knuckledraggers</i>	<i>Dr. Jack Long</i> 	<i>First half of AI course. Breaks included in timing</i>
1130-1300 (90 min)	<i>Lunch</i>		
1300-1630 (210 min)	<i>AI for Knuckledraggers</i>	<i>Dr. Jack Long</i> 	<i>Second half of AI course. Breaks included in timing</i>
Evening	<i>No Host Social</i>	<i>Fran O'Brien's</i>	<i>Social event at legendary Annapolis watering hole</i>

 Denotes Confirmed Speaker



Fall AI Summit – Tuesday | 24 Sep

Legend
Unclassified | Classified



Timing	Topic	Lead / Speaker	Description
0830-0840 (10 min)	USNA Welcome	VADM Yvette Davids ✓	Opening remarks from our host, the Superintendent of the U.S. Naval Academy
0840-0930 (50 min)	Overview of AI	Dr. Jack Long ✓	A view of what AI could look like in the future, welcoming remarks, and overview of Summit agenda
0930-1015 (30 min)	Leadership dashboards	Mr. Jim Raimondo, HQE ✓	Overview and demo of CNO Executive Metrics Dashboard + insights of SECNAV and CMC visualizations
1015-1035 (20 min)	Networking break		
1035-1105 (30 min)	The history of Maven	Col(ret) Drew Cukor ✓	The history of the cross-functional algorithmic warfare team
1105-1145 (40 min)	CAIMANS	LtCol Scotty Black, PhD ✓	Overview of CAIMANS AI project and plans for the coming years
1145-1300 (75 min)	Lunch		
1300-1310 (10 min)	Welcome from PNPS	VADM(ret) Ann Rondeau ✓	A message from President Ann Rondeau on NPS efforts in the realm of AI
1310-1350 (40 min)	Dead Center	Dr. Chris Gifford / Mr. Chris Haughton ✓	A day in the life of a Marine with Dead Center / Agile Model Refinement
1350-1430 (40 min)	CamoGPT	Maj Ryan Keller ✓	Overview and demo of camoGPT
1430-1500 (30 min)	Networking break		
1500-1530 (30 min)	CDAO Summer Interns	LtCol Pedro Ortiz, PhD ✓	The value CDAO found by hosting US Naval Academy midshipmen as summer interns
1530-1600 (30 min)	Label Logic / Ignition	Mr. Terry Schoof / Ms. Maria Buggey ✓	Demo of LLM tool to assist with security classification recommend portion markings
1600-1630 (30 min)	Report modernization	Mr. Luis Velazquez ✓	Report generation / modernization effort to migrate legacy databases to IAPS products
Evening	No host social	McGarvey's	No host social at another of Annapolis's legendary waterholes

✓ Denotes Confirmed Speaker



Fall AI Summit – Wednesday | 25 Sep

Legend
Unclassified | Classified



Timing	Topic	Lead / Speaker	Description
0800-0945 (105 min)	SigInt AI	Ms. Georgianna Campbell ✓	<i>Discussion on opportunities for AI/ML applications to SIGINT and overview of operational requirements and exemplars</i>
0945-1015 (30 min)	Networking break		
1015-1040 (25 min)	GenAI challenges	Dr. Celso De Melo ✓	<i>GenAI research challenges (for scalable cross-echelon command and control)</i>
1040-1105 (25 min)	AI2C overview	Maj Ryan Keller ✓	<i>Overview of Army AI Integration Center in Pittsburgh</i>
1105-1130 (25 min)	Alfred	LtCol Gavin "Toto" Robillard ✓	<i>DC – Aviation's vision for leveraging AI across all domains of naval aviation</i>
1130-1300 (90 min)	Lunch		
1300-1330 (30 min)	BMS	Mr. Gary Shearer ✓	<i>NSWCDD Battle Management System (BMS) Overview</i>
1330-1400 (30 min)	Pioneer	Mr. Ben Goldman ✓	<i>Development and deployment of capabilities for facilitating Test & Evaluation (T&E) of AI and Autonomy</i>
1400-1430 (30 min)	Dreamcatcher	Dr. David Phillips ✓	<i>Log-Ops planning tool in support of Naval missions</i>
1430-1500 (30 min)	Networking break		
1500-1530 (30 min)	Task Force Turing update	CAPT Jeff Anderson ✓	<i>Overview of recent efforts from Task Force Turing</i>
1530-1600 (30 min)	Battering Ram	Dr. Jimmy "Rev" Jones ✓	<i>Air Force Battering Ram overview</i>
1600-1630 (30 min)	USNA summer internships	CDR Ken Maroon ✓	<i>After Action report on USNA's first ever cohort of DS and AI students' summer internships</i>
Evening	No host social	The Choptank	<i>No host social at rooftop bar overlooking people showing off their boats</i>

✓ Denotes Confirmed Speaker



Fall AI Summit – Thursday | 26 Sep

Legend
Unclassified | Classified



Timing	Topic	Lead / Speaker	Description
0830-0910 (40 min)	<i>IRIS and CITADEL</i>	<i>LCDR "Colt" Wettstein, LT Kylie Johnson, Mr. Scott Heckens</i> ✓	<i>USSTRATCOM J52 Strategic Target Maintenance Use Case – IRIS Imagery Change Detection and CITADEL Text Analytics</i>
0910-0950 (40 min)	<i>USCYBERCOM AI Task Force</i>	<i>Dr. Andrea Mask</i> ✓	<i>Overview of US Cyber Command's AI Roadmap</i>
0950-1020 (30 min)	<i>Networking break</i>		
1020-1050 (30 min)	<i>Raven Sentry</i>	<i>Mr. Todd Paulsen</i> ✓	<i>AI-enabled warning model used in 2019-2020 Afghanistan to provide warning of insurgent attacks and inform armed ISR operations</i>
1050-1120 (30 min)	<i>Iron Bounce</i>	<i>Mr. Todd Paulsen</i> ✓	<i>TFSH effort to establish AI-enabled Electro Optic-AIS model leveraging ONI datasets that will support semi-autonomous Maritime Domain Awareness, scouting, combat identification, and long-range fires</i>
1120-1250 (80 min)	<i>Lunch</i>		
1250-1325 (35 min)	<i>Kraken</i>	<i>Dr. Chris Paul</i> ✓	<i>Overview of TRON and Project Kraken, NPS support to Task Force 66</i>
1325-1400 (35 min)	<i>Emerging/Disruptive Threats</i>	<i>Mr. Dave Gerkin</i> ✓	<i>AI Adversarial trends and the future of warfare</i>
1400-1430 (30 min)	<i>TF Hopper</i>	<i>LT Artem Sherbinin</i> ✓	<i>Update from TF Hopper on AI for Naval Surface Forces</i>
1430-1500 (30 min)	<i>Networking break</i>		
1500-1530 (30 min)	<i>ADAPT</i>	<i>Mr. Macpherson Stevens</i> ✓	<i>Overview of Afloat Data Analysis & Persistent Transmission (ADAPT)</i>
1530-1600 (30 min)	<i>SMDII / PASS</i>	<i>Mr. George McVey</i> ✓	<i>Predictive Analytics for Ship Scheduling (PASS)—Ship Maintenance Data Improvement Initiative (SMDII)</i>
1600-1630 (30 min)	<i>GenAI for Navy 2Ks</i>	<i>Mr. George McVey</i> ✓	<i>Using Generative AI to complete Navy Trouble Tickets (Form 2-Kilos)</i>
1630	<i>End of summit</i>		

✓ Denotes Confirmed Speaker



Speaker contact information



Title	F Name	L Name	Role	Organization	email
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Mr.	Luis	Velazquez	Chief Technology Officer	MarCorSysCom	luis.velazquez@usmc.mil



Conference Attendance for DoN Participants



SECNAV 5050

NPS' President, VADM(Ret) Ann Rondeau, has approved a SECNAV 5050 (Conference Request Form). If you need a copy for your records and/or to complete your travel authorization or voucher, please email NWSI@nps.edu and we'll send it to you.

Part of NPS' obligation as conference host is to capture actual costs of the AI Summit. We will reach out to everyone who attended after the Summit with a quick RFI. Thanks in advance for your help with this.

FOR OFFICIAL USE ONLY - PRIVACY ACT SENSITIVE

SECNAV 5050-4
SECNAVREQ 5050-4 (Rev 0)

CONFERENCE REQUEST FORM

PRIVACY ACT STATEMENT

AUTHORITY: 50 U.S.C. 3025, Secretary of the Navy; 50 U.S.C. 3021, Intelligence, Marine Corps, and SEC. 5050 (DOD) as amended; DODM 5000.002, Acquisition Authority; DOD 5525.076, Joint Chiefs Regulation; DOD Conference Directive v. 4.2

PURPOSE: To report on actual attendance pertaining to requests to travel and attend conferences by Department of the Navy (DON) employees.

ROUTINE USE: Data is used by DON system managers, administrative offices and system administrators that have a need to know to process requests. The information will not be shared with other agencies or contractors.

DISCLOSE: Voluntary, however, failure to provide the requested information may result in a delay or inability to process requests.

SECTION I - To be completed by Requestor

Thoroughly review the attached instructions before completing this section.

1. TYPE OF REQUEST: HOSTING ATTENDANCE

2. APPROVAL AUTHORITY (see instruction 1): IER 1 IER 4 OTHER

3. DATE OF REQUEST (DDMMYYYY): 06Aug2024

4. REQUESTING ORGANIZATION/COMMAND/OFFICER:
Naval Warfare Studies Institute (NWSI), Naval Postgraduate School (NPS)

5. CONFERENCE TITLE:
Artificial Intelligence (AI) Summit

6. DATES OF CONFERENCE (from DDMMYYYY) to (DDMMYYYY): 23Sep2024 to 26Sep2024

7. CONFERENCE HOST AND/OR CO-SPONSOR:
NPS, Naval Warfare Studies Institute (NWSI)

8. LOCATION OF CONFERENCE (room, city, state, ZIP Code, Country):
US Naval Academy 133 Blake Road, Annapolis, MD 21402

9. PURPOSE OF CONFERENCE AND TARGET AUDIENCE:
The Naval AI Summit facilitates cross-organizational, information sharing, and promotes lessons learned from across personnel, academia, and industry. The AI Summit is a semi-annual event that explores marine, naval, terrain, and defense related technical work topics to address the Naval AI Task Force's key findings around data, infrastructure, and competency that currently limit the DoD from realizing AI. Registration open for six-person or virtual attendance.

10. OFFICIAL AGENDA ATTACHED: Yes No - Explanation required

11. CONFERENCE WEBSITE URL, if applicable: <https://nps.edu/news/ai-summit-spring-2024>

12. NUMBER OF ATTENDEES:

From DON	100	From DON	35	Total DON	135
# Hosted					
Total Air Force	10	Total Army	10	Total Other DoD	10
Other Agency Name: <input type="text"/>	100	Other Agency Name: <input type="text"/>	35	Other Agency Name: <input type="text"/>	Total: <input type="text"/>
Other Agency Name: <input type="text"/>	Total: <input type="text"/>	Other Agency Name: <input type="text"/>	Total: <input type="text"/>	Other Agency Name: <input type="text"/>	Total: <input type="text"/>
Total Number of Attendees at Conference: 185					

13. ATTENDEE JUSTIFICATION (See instruction 1)

ATTENDEE FULL NAME	JOB TITLE	CONTROLLING CITY	WALK-AT CONFERENCE
1. Alievskiy, NWSI/Naval Academy, personnel	Faculty, USN	Metairie, LA	Other: Organize, Present, Q

14. TRAVEL DATA (DON employees travel on government expense)

From (DDMMYYYY): 23Sep2024 To (DDMMYYYY): 27Sep2024

Comments: If travel is combined with leave or other official business explain below

NPS Priority one keynote speakers and presenters, and as the AI Summit is centrally, they may travel before the AI Summit is set formal at NPS.

15. Additional Remarks (log file of presentation, name of panel, value of attendance)

Based on prior AI Summits, and growing interest in the topic we expect approximately 100 local DON participants from the Naval Academy and greater DC Area. We anticipate 40 other DoD personnel from the host base. This event is open to all.

SECNAV 5050-4 (12/2019) FOR OFFICIAL USE ONLY - PRIVACY ACT SENSITIVE Page 1 of 1