









Web3D Collaborative Naval Visualization Workshop

6 December 2019

Virginia Tech Research Center

Executive Briefing Center, 2nd Floor 900 N Glebe Rd, Arlington, VA 22203

Virginia Tech and Web3D Consortium are hosting this workshop to show Naval Enterprise leaders the use of Web-based 3D visualization collaboration by Government, Academia and Industry practitioners. Web3D Consortium membership adds significant value. The event is intended to foster professional networking and showcase current/emerging capabilities for enterprise-scale, networked geo-enabled 3D communications that increase both shared understanding and technical coordination agility.

Time (EST)	Topic	Topic Lead
0830-0900	Open Registration	
0900-0910	Welcome Aboard, and Stand By For Action!	Dr. Nicholas Polys (Virginia Tech and Web3D President) Dr. Don Brutzman (NPS MOVES)
0910-0930	Web3D Consortium offers Value Proposition Enabling Enterprise Connectedness and Real-Time Networked Communications via ISO Standards	Anita Havele (Web3D Executive Director) and Dr. Nicholas Polys (VT and Web3D President)
0930-0950	SPIDERS3D Collaborative Visualization for Navy and US Coast Guard Risk Assessment Support Accelerating Pace of Group Understanding + Consensus	Dr. Don Brutzman (NPS MOVES)
0950-1020	VT 3D Blacksburg and VT Visionarium: Translating Theory into Real-World Practice Exploring Software Infrastructures to Related Structure & Function in Dynamic Geo-enabled Systems	Peter Sforza (VT, Director Center for Geospatial IT) Dr. Nicholas Polys (VT, Director of Visual Computing)
1020-1040	Web3D Geo-Enabled Interoperability Unlock Adaptation, Reuse of Existing GIS Data Investments	Tom Cowan (<u>Synergy Software</u> <u>Design</u>) & Anthony Scardino (GIS)
1040-1100	Networking Break	
1100-1120	3D Models for Naval <u>Underwater Archeology</u> Challenges, Requirements that Match Operational Needs	Shanna Daniel (Naval History and Heritage Command, NHHC)
1120-1140	3D Metadata Model for Archival Data Publication Identify Reference Terms, Create Exemplars, and Standardize Metadata Models that describe Digital Twins and Surrogates	Dr. Nicholas Polys (VT & Web3D)
1140-1200	3D Visualization for Contingency & Master Planning Enabling New Joint Service Collaboration Capabilities	John Ouellette (VP, <u>Versar</u>)
1200-1300	Lunch	
	Lunch Time Discussion, Demonstrations Hand-Held Laser Scanning and Measurement	Bill Gutelius (Qntfi)

1300-1320	Enabling Better Shore, Naval Expeditionary	Alex Viana (NAVFAC HQ) and
	Readiness via Networked 3D Virtual Environments	Gerritt Lang (NAVFAC Engineering
	Model Based Collaboration Capabilities Accelerate Pace of Technical	& Expeditionary Warfare Center)
	Coordination and Planning Across Naval Commands	
1320-1340	Naval Innovation and Long-Term Impacts	<u>Dr. Dale Moore</u>
	Exploring Future Benefits, Risks and Outcomes through Agility	
1340-1400	NavalX Playbooks: Potential Pattern for Growth	CDR Sam "Chubs" Gray, NavalX
	Sharing High-Impact Knowledge, Skills Across Naval Enterprise	Tech Bridge National Director
1400-1420	5D Virtual Environments Collaboration Capability	Mike Russalesi (Founder and COO,
	Emerging SPIDERS3D Functionalities For Navy Decision Making	Synergy Software Design)
1420-1440	X3D Best Practices for Computer-Aided Design CAD,	Dr. Vince Marchetti (Kshell, Inc. &
	3D Printing, and 3D Scanning Applications	Web3D), Dr. Nicholas Polys (VT),
	Enable Visualization & Interchange of X3D Across Technologies	Web3D Design Printing and
		Scanning Working Group)
1440-1500	Enabling Afloat Readiness via UAV 3D Scanning	LT Todd Coursey (NSWC PHD) and
	Accelerating 3D Ship Configuration Data to Shore Maintainers	Chuck Spaulding (Aerial Alchemy)
1500-1520	Networking Break	
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Multiple speakers are presenting use cases that together show that a "bigger space" is emerging for collaborative 3D data that can affordably improve digital connectedness, accelerate consensus/decision making processes. This approach can work across systems engineering, advance conceptual planning, and collaborative virtual rehearsal for ashore/afloat logistics activities. Sharable networked publication using open web standards such as Extensible 3D (X3D) Graphics and HTML5 are the key to archival durability and compatible interchange of diverse file formats for provenance metadata and 3D data.

Workshop participants can discuss their reactions "around the table" together to share ideas of opportunities, and potential synergies that can further the art of the possible to realize adoption of practical capabilities that can have positive effects on both Shore and Fleet readiness goals, contracting requirements, logistics, maintenance and operations.

1700	Adjourn Workshop	Additional discussions welcome

Join Zoom Meeting - https://zoom.us/j/120864828?pwd=ano2djZ0MzFKaVhEb1EvRGFBU3hUZz09

Meeting ID: 120 864 828, Password: 100324

Audio: 1-408-638-0968, Passcode: 120-864-828#, or 1-669-900-6833, Passcode: 120-864-828#