Greg Tozzi

Senior Data Scientist | Former Senior Military Officer | Active Clearance

Professional Profile

Senior military officer (Captain, U.S. Coast Guard) passionate about public service and the practice and promise of data science. Customer-focused with firmly-held view that data science serves the needs of decision-makers. Dedicated and driven with a proven track record of achieving remarkable results—often under extremely challenging circumstances—individually, as a collaborator, and as a leader. Turns intent into action. Brings rare mix of sharp technical skills and deep expertise in leadership, operations, policy, and strategy.

Data Science Skills and Projects

Python | R | SQL | Matlab/Octave | Bash

Numpy, Pandas, data.table

Connecting Prediction to Decision Making

- CNAS Report on Prediction in Government Decision Making

ML/Deep Learning for Computer Vision & Natural Language Processing

TensorFlow including functional API & custom loss functions, Scikit-Learn, Huggingface, Gensim, inferencing at the Edge

- Toward Celestial Navigation with Deep Learning
- Detecting Discrimination in Court Documents
- Pediatric Pneumonia in X-Ray Images

Causal Inference and Econometric Analysis

Designing experiments, randomization inference, A/B testing, regression analysis, robust estimation

- Analyzing North Carolina Crime Data
- A/B Testing for Email Fundraising

Visualization

D3, Vega-Lite, Tableau, ggplot2, Shiny, HTML/CSS/JS

Visualizing San Francisco Bay Vessel Traffic

Cloud

Big Query, Docker for deployment, Kafka, Spark, Flask

Social Network Analysis

igraph

Education

University of California, Berkeley

Master of Information & Data Science, 2021

MBA, 2008

Massachusetts Institute of Technology

Fellow, MIT Seminar XXI, 2014-2015 Master of Science, Mechanical Engineering Master of Science, Naval Architecture & Marine Engineering, 2004

United States Coast Guard Academy

Bachelor of Science, Naval Architecture & Marine Engineering, 1998

Certifications

Certified TensorFlow Developer Certified Scrum Product Owner

Additional Strengths

Developing strategies for data centricity
Data science & ML rapid prototyping
Leadership & change management
Messaging & communication
Project management
Operations

Experience

Senior Lead Data Scientist Booz | Allen | Hamilton

Norfolk, VA 2021 - Present

- Technical lead for cross functional team of 10 developers, data scientists, data engineers, cloud architects, and knowledge managers working in an Agile environment supporting U.S. Army client. Migrated disparate data stores to the cloud. Developed and delivered cloud-based web applications for search and discovery across data lake. Authored Data Centric Strategy Implementation Plan and briefed elements to SES gaining executive support. Developed rapid prototype of user-centric social network analysis tool.
- Senior Data Scientist supporting NATO client. Developed architecture for multi-cloud deployment of data products. Led implementation of rapid prototyping capability to support requirements generation. Introduced client to containerization and transformer models. Supported development of data exploitation strategy.

Executive Assistant to the Assistant Commandant for Acquisition

Washington, DC

U.S. Coast Guard Acquisition Directorate

2019 - 2021

- Chief of staff for the Coast Guard's largest directorate (1,000 military + civilian, \$1.7 billion annual appropriation) responsible for acquiring ships, aircraft, and IT systems in support of U.S. Coast Guard mission execution.
- Principal assistant to Rear Admiral (O-8) and executive leadership team consisting of one flag (O-7) and four SES. Provided candid advice, chaired Senior Leadership Group (O-6/GS-15s), advocated for Leadership & Diversity Council. Oversees staff processes and links to 3- and 4-star leadership and the Department of Homeland Security.
- Engaged think tanks, industry, DoD R&D ecosystem, and DIU to inform response to demand signal for AI/ML.

Commanding Officer

Portsmouth, VA

U.S. Coast Guard Cutter HARRIET LANE

2017 - 2019

- Commanded a Coast Guard cutter with a crew of 100 charged with enforcing laws and treaties and conducting search and rescue from the Gulf of Maine to the Galapagos Islands.
- Fostered environment of experimentation. Developed novel data-forward tactics accounting for operational uncertainty in counternarcotics operations and applied them in ten kinetic drug interdictions. Ship won the U.S. Interdiction Coordinator's Award recognizing the nation's top maritime interdiction unit as a direct result.
- Taught college courses to crew at sea as pro-bono adjunct professor at Tidewater Community College.

Senior Military Fellow

Center for a New American Security (CNAS) Washington, DC | 2016 - 2017

- Represented the U.S. Coast Guard at a prestigious Washington, DC think-tank focused on national security policy.
- Research-conducted with Good Judgement, Inc. and the U.S. Department of State focused on building agility in governmental decision-making through effective prediction.

U.S. Coast Guard Liaison Washington, DC

Department of State, Bureau of International Narcotics and Law Enforcement Affairs

2014 - 2016

- Key contributor to National Security Council's maritime security strategy for Central America.
- Teamed with interagency partners and international interlocutors to enact and extend diplomatic agreements.
- Invited and funded by the United Nations Office on Drugs and Crime to attend the 2016 Expert Group Meeting on Transnational Organized Crime at Sea held in Vienna, Austria.

Operations Officer Alameda, CA 2012 - 2014

U.S. Coast Guard Cutter BERTHOLF

- Led a department of 40 Coast Guardsmen coordinating the ship's operations from the Arctic to South America.
- Planned & executed the USCG's first operational evaluation of ScanEagle unmanned aerial system. Patrol tactics led to two drug interdictions during 12-day test, paving the way for fleet-wide adoption.
- Strong proponent of data-driven operations and creating a fail fast operational culture. Novel visualization of entities in the Arctic revealed key actors. Fusion of multi-source geospatial data revealed patterns of illicit activity.

U.S. Coast Guard Attaché Ta' Qali, Malta

U.S. Defense Attaché Office, U.S. Embassy Valetta

2010-2012

- Participated in evacuation of Embassy Tripoli staff, other Americans, and third-country nationals from Tripoli, Libya aboard commercially-chartered fast ferry in February 2011 ahead of Operation Odyssey Dawn.
- Accredited diplomat charged with advancing U.S. defense and maritime security interests.
- Provided subject matter expertise in Monte Carlo-based search and rescue planning and maritime law enforcement to students from Malta, Europe, and Africa.
- Communicated key insights related to maritime security and effects of the Arab Spring to senior policymakers.

U.S. Coast Guard Officer

- Variety of positions at sea and ashore. As supervisor of a section of staff naval engineers, developed data-driven forecasting to quantify cost uncertainty associated with major maintenance periods. Justified first increase in maintenance budget in two decades for 40 year-old assets dramatically improving uptime.
- Designated Cutterman and Surface Warfare Officer. Served as Navigator, USS BUNKER HILL for exchange tour.