
Employment

ThayerMahan, Inc.
Groton CT
February 2017 - Present

Director of Research and Development

- Grew ThayerMahan's R+D team from 1 to 25 engineers and technicians. Team specializes in delivering quick-turn autonomous surveillance capabilities to government customers.
- Responsible for IT architecture at both Secret and unclassified levels. Including significant work with cloud computing and edge computing. Maintained compliance with 800-171 and CMMC.
- Organized and directed teams for extended offshore testing of R+D products. Developed plans and objectives for sea trials and responded when testing was overcome by events.
- Coordinated testing and qualification of systems with government stakeholders to ensure interoperability with operations-centers and security requirements.
- Guided products from proof-of-concept to full deployment. Examples include; in-house high precision RTK GPS compass, autonomous jet-ski and SIGINT intercept system.
- Developed a 24/7/365 operations center and team to support deployed piloting of vehicles.
- Oversaw post-mission ingest, processing, repair and maintenance of deployed systems to maintain operational capability and enhance vehicle reuse and robustness.

Sea Machines Robotics
Cambridge MA
January 2014 - December 2016

Cofounder / CTO

- Co-founded Sea Machines Robotics to bring advanced autonomous systems into the commercial maritime space and make operations safer, more efficient and more reliable.
- Designed, fabricated, tested, and demonstrated the Sea Machines V0 vessel, an autonomous 24' dual azimuth drive tugboat.
- Directed all technical aspects of the start-up, from supervising software developers to ensuring that hardware was fabricated correctly and on-time.

Texas Marine and Offshore Projects
Houston TX
(Assignments worldwide)
April 2014 - January 2015

Survey/Positioning Manager

- Managed mobilization of a 525' heavy lift ship in Singapore. Ensured compliance with ABS, Marine Warranty Survey and the USCG when ship was engaged in heavy lift operations.
- Chartered tugboats devised and executed sea trials in the South China Sea to test functionality. Wrote and implemented maritime security operations plan to keep flotilla safe during testing.

TITAN Salvage
Pompano Beach FL
(Assignments worldwide)
February 2012 - April 2014

Specialist Consultant For Emergency Response and Wreck Removal

- Managed the installation, planning and commissioning of \$17M PLC-based ballast control system onboard the wreck of Costa Concordia. The system was completed on time, operated correctly, and allowed the ship to be raised without equipment failures.
- Directed field engineering and fabrication of specialized components as needed.
- Worked on extremely small, high pressure teams to plan, technically validate and bid work for salvage, diving and wreck removal.

Education

The Catholic University of America
January 2008 - May 2011

Bachelor of Science in Architecture
Graduated on Dean's List in May 2011

Skills / Presentations

Skills

- Management of small, results driven teams
- Coordination of contracts and budgets for contracting and outsourcing of projects
- Offshore and subsea specific engineering
- Design for Manufacture using 3D CAD
- CAD/CAM workflow for fabrication
- Marine electronic charting and guidance
- Hydraulic and electric system design and build
- CNC machine operation
- 3D scanning
- Reverse Engineering
- PCB design and prototyping
- Cloud computing management and design
- Secure Computing and Information Assurance

Selected Publication/Presentations:

6 Patents (either provisional or full), sole inventor of 4.
 Speaker: IEEE/MIT Electric Ship Symposium, 2021
 Speaker: MIT MOOS-DAWG 2022, 2019, 2015
 Panel Moderator: Re/Work Deep Learning Summit Boston, 2017
 Panelist: AUUVSI Robotica Conference
 Autodesk University: "Building Render Farms in the Cloud; Using EC2 for On-Demand Rendering", 2014

Certifications:

Liquid Robotics Wave Glider SV3 Qualified Pilot and Maintainer (Completed 2017)
 SDI Rebreather 50m (Sentinel Type), PADI Rescue Diver/Tec 50 Decompression Diving Licenses