

## Minh Tran

*Oceanographic Electronics Technician*

### EXPERTISE

Background and interest in electronics design, embedded low-level software development, digital signals processing, control systems, and computer networks.

Microcontroller and sensor system application developer, data acquisition, monitoring, analysis, low-level microcontroller hardware debugging, computer algorithms, software design/TDD development, software/hardware system documentation.

### QUALIFICATION SUMMARY

- Competent with Campbell Scientific's LoggerNet tools, CR1000 datalogger, CRBasic, CoraScript
- Programmed Atmel 8 & 32-bit AVR, PIC32, STM 32-bit microcontrollers, familiar with chip architecture & peripherals; Atmel Studio,
- Interfacing datalogger firmware with telemetry equipment: radio, satellite, phone/land-line/cellular modems
- Interfacing datalogger firmware with metocean sensors
- ADCPS (WH300, 75KHz, AWAC), Electronic Compass w/ Pressure/Humid/Temp/Wind Sensors, GPS, IMUs (Triaxys Wave Sensor), CTDs
- Maintenance, Testing & Deployment of the equipment above
- C/C++/C#, Matlab, Python
- Familiarity with Windows/Linux OS, batch/bash/make scripts
- Familiarity with circuit simulation (LTSpice), PCB design & prototyping (Eagle CAD)

### WORK EXPERIENCE

2017-Present                      Woods Hole Group, Inc.  
Summer 2015                      Autoliv (Internship)



### Education

2016 – B.S.  
Computer Systems  
Engineering  
*University of Massachusetts -  
Amherst*

### Licenses and Registrations

N/A

### Professional Affiliations

-N/A

### Publications & Presentations

N/A

## KEY PROJECTS

### **Maintenance & Reservicing of ADCP-Mounted Gantry System: West Auriga, West Capricorn, West Vela, Noble Bob Douglas, Gulf of Mexico – Electronics Field Technician**

Assisted in refurbishment and troubleshooting of Woods Hole Group, Inc. (WHG) rig-mount ADCP gantry system dataloggers, electronics, and winches. WHG designs and deploys single and dual electro-mechanical cable mounts for Acoustic Doppler Profilers (ADCPs), which provide near-real-time data collection of ocean current profiles to drill ship operators.

### **Maintenance & Reservicing of MetOcean “Mad Dog” Buoy, Gulf of Mexico – Electronics Field Technician**

Troubleshoot and tested datalogger firmware, controlling the power and data collection schedules of sensors mounted on the surface buoy and subsurface float. QC and verification of satellite and hydroacoustic near-real-time data telemetry. Database admin for collected instrument data. The Mad Dog buoy and subsurface float, together with mooring components, host a suite of Metocean sensors and enough ADCPs to provide near-real-time current profile measurements in 1400m water.

### **Predeployment Instrument Testing, Database & Datalogger setup for MetOcean “Equinor” Buoy**

Assisted in the repurposing of a Metocean buoy, which was subsequently deployed in Santos Basin in the Atlantic Ocean. Tested and prepared ADCPs, conductivity-temperature-salinity (CTDs) sensors, and single point current meters prior to installation and deployment.