

# SECTOR: Industry

Marcel Lefrançois, Ph.D.



**Ultra Maritime Systems**  
Dartmouth, Nova Scotia

**Head of Domain Specialism**

**discipline:** Engineering Physics

**current focus:** Project Engineering Lead, CSC Integration

**concurrent work:** Sonar Systems and Sensors R&D

**past job:** Lead Systems Engineer Maritime Theatre Missile Defence Forum

Defence Scientist (Group Lead / Sonar R&D / Sonar and Combat Systems)

**sectors worked:** Industry, Government

**technical orgs:** IEEE

**extracurricular:** Scout Leader

## SECTOR: Industry

Kathleen Svendsen, M.A.Sc, P.Eng



**discipline:** Electrical / Computer

**current focus:** Marine Engineering

**past job:** Software development

**sectors worked:** Marine, Space

Senior Engineer  
Lloyd's Register

**extracurricular:** Sewing, Dog walks, Home Renovation

## SECTOR: Academia

Amir Aghdam, Ph.D., P.Eng., SMIEEE, FEIC



**Concordia University**  
Montreal, Quebec

**Professor**

**discipline:** Electrical & Computer Eng.

**current focus:** Networked control systems

**concurrent work:** Consultant for DND

**past job:** Systems Engineer

**sectors worked:** Industry, Academia

**technical orgs:** (IEEE CSS, IEEE SysC, IEEE R7)

**extracurricular:** Playing Guitar

## SECTOR: Academia

Mae L. Seto, Ph.D., P.Eng., SMIEEE, FEC



**Dalhousie University**  
Halifax, Nova Scotia

**Associate Professor**

<b>discipline:</b>	Electrical / Mechanical
<b>current focus:</b>	underwater communications
<b>concurrent work:</b>	consultant for Dept. National Defence
<b>past job:</b>	Defence Scientist
<b>sectors worked:</b>	industry, gov't, academia
<b>technical orgs:</b>	IEEE (CAS OES, RAS, Industry Act.)
<b>extracurricular:</b>	Girl Guide Leader



## SECTOR: Government

Stéphane Blouin, Ph.D, P.Eng., SMIEEE



**Defence R&D Canada**  
Darmouth, Nova Scotia

**Defence Scientist**

<b>discipline:</b>	Mechanical / Electrical / Chemical
<b>current focus:</b>	Autonomous Underwater Networks
<b>concurrent work:</b>	Sessional @ Dalhousie University
<b>past jobs:</b>	Ind./gov. R&D (USA, Canada, France)
<b>sectors worked:</b>	Manufacturing (Automotive, pharma., food, gas, petrochemical), Academia
<b>technical orgs:</b>	IEEE, OIQ (Prof. Eng.)
<b>extracurricular:</b>	cycling/swimming, gardening

# SECTOR: Government

Brandy Armstrong, MS, PhD candidate



**University of Southern  
Mississippi, School of Ocean  
Science and Engineering  
Stennis Space Center, MS**

**Research Scientist**

**discipline:** marine science, physical oceanography

**current focus:** ocean modeling using the Coupled Ocean Atmosphere Wave Sediment Transport (COAWST) modeling system

**concurrent work:** Vice President of Professional Activities, Oceanic Engineering Society, Deputy Co-chair OCEANS 2023 Gulf Coast

**past job:** United States Geological Survey oceanographer and hydrologist

**sectors worked:** State and Federal Government, Academia

**technical orgs:** IEEE Oceanic Engineering Society, Coastal and Estuarine Research Federation, American Geophysical Union

**extracurricular:** Mother, beekeeping, gardening, crafting, reading

# SECTOR: Entrepreneurship

Nehad El-Sherif, M.Sc., P.Eng., MBA, SMIEEE



**discipline:** Electrical

**current focus:** Electrical safety, product development

**concurrent work:** Sessional @ University of Saskatchewan

**past job:** Product management R&D

**sectors worked:** Manufacturing, Academia

**technical orgs:** IEEE (R7 Industry Relations, IAS), CSA

**extracurricular:** Interpretation, basketball, squash

**MNKYBR Technologies**  
Saskatoon, SK

**Founder & President**

# SECTOR: Entrepreneurship

Niru Somayajula



- discipline:** GeoPhysics
- current focus:** Acoustics, Strategy, Finance, BusDev
- concurrent work:** Board member @ OSC, Elephant Thoughts, Prasad Foundation, Collingwood Music Fest
- past job:** Operations Manager
- sectors worked:** Manufacturing
- extracurricular:** @ceowhocooks, triathlon, anything outdoors, anything outdoors with my kids



# Sector Mentors

Example questions – ask any you have in mind

INDUSTRY	ACADEMIA	GOVERNMENT	ENTREPRENEURSHIP (SME, consultants, contractors)
<b>Kathleen Svendsen</b> Research Engineer (Lloyd's Register, NS)	<b>Amir Aghdam</b> Professor (Concordia University, QC)	<b>Stephane Blouin</b> Sr. Defence Scientist (DRDC Atlantic, NS)	<b>Nehad El-Sherif</b> President (MNKYBR Technologies, SK)
			
<b>Marcel Lefrancois</b> Head   Domain Specialism (Ultra Maritime Systems, NS)	<b>Mae Seto</b> Associate Professor (Dalhousie University, NS)	<b>Brandy Armstrong</b> Oceanographer/ Hydrologist (U.S. Geological Survey, USA)	<b>Niru Somayajula</b> President & CEO (Sensor Technology Ltd., ON)
			

- what kind of engineering problems do you work on?
- describe your career trajectory to get to the point that you are at?
- what do you like most about your job (creativity, autonomy)?
- have you changed jobs within the last 5-10 years?
- what kind of work arrangements are possible at your organization?
- does your company support post-graduate studies for employees?
- how is work-life balance achieved in your organization?