

# INCOSE Canada Chapter Quarter 1 Members Newsletter

## April 2024



### Introduction

The INCOSE Canada Chapter Board is looking forward to launching a quarterly newsletter for all chapter members. As this is a new addition to our chapter efforts, please let us know if you have any feedback so that we can improve it over time.

If you are interested in joining us as a volunteer, please email us at [canada@incose.net](mailto:canada@incose.net)

### Membership Report

#### Welcome to Our Newest Members!

We are excited to welcome our newest INCOSE members to the Canada Chapter. Please look for them at future events. The following members joined in Q1 2024:

<b>Nova Scotia</b>	Mustapha Quadre, Erin McMillan
<b>Quebec</b>	Mathieu Boisvert, Jonathan Schwartz
<b>Ontario</b>	Robin Jose, Amir Pourkhorshid, Parth Yadav, Guy Zur, Tamra Edwards, Mohammad Rasoul Golkaramnay, Ming Lei, Leslie Bennett, Alexei Ofitserov, Tristan Ruel, Hany Soloumah
<b>Alberta</b>	Alykhan Nanji
<b>British Columbia</b>	Arman Daragahi, Alexander Sadowski, Jillian Cooke, Alex Robinson, Trevor Zakus

## Congratulations to Our Newest Systems Engineering Professionals!

### Associate Systems Engineering Professional (ASEP)

Arman Daragahi, Robin Lau

### Certified Systems Engineering Professional (CSEP)

Fardad Sarraf-zadeh, Rafael Novak, Alexander Vladimirsky, Kalaivani Kanagaratnam

*Note: Members who have opted out of the directory/email have been excluded from this list above. Please let us know if you think you have been omitted by accident, and we will be sure to include you in our next newsletter!*

*Many of these individuals took part in the INCOSE Canada chapter's study group in **2023**. Another study group was initiated in **Q1 2024** in which systems engineers are studying the INCOSE Systems Engineering Handbook in 12 weeks and get ready for INCOSE Certification Exam. If we have enough interest, we will be looking to start additional study groups in **Q2/Q3 2024** for those interested in pursuing either ASEP or CSEP certification.*

## Past Events

### Feb 11th - Leveraging AI in Systems Engineering ([Event Recording Link](#))

This presentation provided:

- An overview of Artificial Intelligence (AI), Machine Learning (ML), and Data Science, defining their roles in simulating human intelligence, enabling systems to learn from data, and extracting meaningful insights. Emphasis is placed on the pivotal role of AI in Systems Engineering (SE) and exploring its contribution to various stages of the process.
- Examples to illustrate how AI enhances efficiency, predictive modeling, optimization, and decision-making, while addressing stakeholder needs.
- AI role in architecture and automation evolved in the system design process and the developing capacity of AI in SE and its potential future impact.

### Jan 22nd - Strategic Insights: INCOSE Canada's 2023 Retrospective and Vision for 2024 ([Event Recording Link](#))

An exclusive INCOSE Canada webinar where:

- The Board of Directors provided an in-depth review of 2023. This session examined our successes and challenges, offering insights into our strategic decision-making processes.
- Unveiled exciting initiatives for 2024 outlining both strategic and operational plans.
- Received attendees' thoughts on Canada Chapter planned technical program for 2024.

## Upcoming Events

April 9th - Needs, Requirements, Verification, and Validation Management ([Registration Link](#))

This is an INCOSE virtual event brought to you at no cost by INCOSE Canada Chapter featuring speaker Lou Wheatcraft, senior consultant and managing member of Wheatland Consulting, LLC.

- **Abstract:**

Needs, Requirements, Verification, and Validation Management (NRVVM) separates the “management” of NRVV processes and data from the “execution” of NRVV activities. NRVVM is a cross-cutting series of activities that span all life cycle process activities. The focus of NRVVM activities is to manage the artifacts that result from the NRVV activities to ensure alignment and consistency across the life cycle. During this presentation, the activities associated with preparing for NRVVM and performing NRVVM activities will be discussed as described in the INCOSE Requirement WG Needs and Requirements Manual (NRM).

- **Presenter’s Bio:**

Lou Wheatcraft is a senior consultant and managing member of Wheatland Consulting, LLC. Lou is an internationally recognized expert in systems engineering with a focus on needs, requirements, verification, and validation across the system lifecycle. Lou has over 50 years’ experience in systems engineering, including 22 years in the United States Air Force. Lou has taught over 200 requirement seminars over the last 23 years. Lou supports clients from government and industries involved in developing and managing systems and products including aerospace, defense, medical devices, consumer goods, transportation, and energy. Lou has been an active member of INCOSE for over 23 years and is the chair of the Requirement Working Group (RWG). Lou is a principal author of several RWG manuals and guides including the Needs and Requirements Manual (NRM), Guide to Needs and Requirements (GtNR), Guide to Verification and Validation (GtVV), and newly released version 4 of the Guide to Writing Requirements (GtWR).

May 9th - Needs, Requirements, Verification, and Validation Management

INCOSE Canada Chapter is hosting an in-person meet-up in Downtown Vancouver, BC:

- At **Tap & Barel - Convention Centre** (Location)
- on **Thursday, May 9, 2024, 5 pm PST.**

The purpose of this event is to provide the INCOSE Canada Chapter members in the Greater Vancouver Area an opportunity to meet-up, mingle with each other, and discuss various Systems Engineering topics.

*A registration email has been sent out to INCOSE Canada Chapter members. Please email us at [canada@incose.net](mailto:canada@incose.net) if you have not received the email and would like to join this meet-up.*

## June 10th - Increasing the Success Rate of AI and ML Systems Deployment at the Enterprise Level *(Registration Link will be sent to chapter members prior to this event)*

This is an INCOSE virtual event brought to you at no cost by INCOSE Canada Chapter featuring speaker Mehran Irdmoussa. Join us as Mr. Irdmoussa shares his insights and unique perspective and research on increasing the Success Rate of AI and ML Systems Deployment at the Enterprise Level.

- **Abstract:**

As organizations increasingly adopt artificial intelligence (AI) and machine learning (ML) technologies to drive innovation and business growth, the challenge of efficiently deploying and managing AI/ML systems in production becomes more critical. This presentation will explore the augmentation of MLOps, a discipline focused on efficiently deploying and managing ML models, with Enterprise Architecture (EA), a strategic planning approach for aligning IT infrastructure and business objectives. We will discuss how this augmentation can enhance the success rate of AI/ML systems deployment at the enterprise level. In this presentation, we will cover the following key topics:

- The current problems in the industry and the why to motivate this research efforts
- Strategic alignment between AI/ML initiatives and overall business goals
- The role of MLOps in streamlining the deployment, management, and continuous improvement of AI/ML models in production environments
- The benefits of augmenting MLOps with EA, including improved resource management, standardized processes, and better collaboration among stakeholders to increase the success rate of AI/ML systems deployment at the enterprise level
- Challenges arise when augmenting MLOps and EA, such as organizational resistance, complexity, scalability, and strategies for overcoming these challenges.

- **Presenter's Bio:**

Mr. Irdmoussa is a distinguished AI strategist and Enterprise Architect with a decade of experience in the research and development of cutting-edge AI solutions. His expertise lies in operationalizing complex systems from concept to deployment, boasting a 100% success rate. As a passionate advocate for AI research and its seamless integration into modern systems engineering and enterprise architecture, Mr. Irdmoussa has become a sought-after thought leader in the field.

*If you are interested in presenting in one of the Canada Chapter's events, please reach out at [canada@incose.net](mailto:canada@incose.net). Different Systems Engineering topics are welcomed including Requirements Management, Model-Based Systems Engineering (MBSE), Verification and Validation, Machine Learning/AI, Cyber Security, and Systems Safety/FMEA. **Presenters get a certification from INCOSE Canada Chapter for their contribution to the chapter.***

## Accomplishments in 2023

- Gained 17% growth in overall chapter membership level compared to 2022
- Hosted 11 technical events with great member participation rate
- Engaged in industry outreach by providing keynote speaker to AECOM's Systems Engineering Conference in June 2023
- Hosted workshops on 'Creating an Awesome Chapter Website' for other INCOSE Chapters
- Awarded Silver Chapter status for the INCOSE Chapter Circle Award 2023

## Canada Chapter's initiatives for 2024

- Hold Systems Engineering Student Competition
- Participate in the 18th Annual IEEE International Systems Conference ([Link](#))
- Hold in-person Networking sessions
- Improve Canada Chapter's membership engagement
- Improv Canada Chapter's technical program

## Meet the new INCOSE Canada Chapter Board Members

In case you missed it, your elected 2024 INCOSE Canada Chapter board consists of:

### President

Terry Fitzgerald



### Vice-President and President-Elect

Tony Wu



### Membership Director and Treasurer

Ivan Taylor



### Technical Program Director

Ivan Rodrigues



### Communication Director

Arman Nikkhah



### Secretary

Pengzhou Lu



### Webmaster

Stéphane Lacrampe



### Past President

Ray Barton



To learn more about board members' background, please visit *INCOSE Canada Chapter Website* ([Link](#)).

## Workshops and Conferences

Save the date for  
**#INCOSEIS**  
Tuesday 2 - Saturday 6 July

**34<sup>th</sup>** Annual **INCOSE**  
international symposium  
hybrid event  
Dublin, Ireland

For further information about the *34<sup>th</sup> Annual INCOSE International Symposium* visit this [Link](#).