Data Management & Analytics Community

Artificial Intelligence and Machine Learning in Public Sector

TRAINING

A Tool-Kit to Uplift Capability, Systems and Governance for Impactful, Sustainable Outcomes

Facilitated by
DR. MAHENDRA SAMARAWICKRAMA
Director
The Centre for Sustainable AI

Online → 19 - 20 October 2022, 10am – 2pm AEDT

PUBLIC SECTOR NETWORK

Certified B Corporation

A Tool-Kit to Uplift Capability, Systems and Governance for Impactful, Sustainable Outcomes

Artificial intelligence and machine learning have proven to be powerful cross-functional tool in the public sector. From improving operational efficiencies, providing valuable insights, and uplifting service delivery and customer experience – AI, ML and Data Modelling are quickly becoming a core competency in government agencies.

On the flip side. It has been estimated that **85% of AI projects** will fail and deliver erroneous outcomes through 2022, largely due to biases in the data, algorithms or people managing them.

This statistic won't be a surprise to most data scientist in the public sector. Algorithms are no silver bullet and its success depend wholly on the quality of your data sets. AI driven technology continues to evolve, and we gain a deeper understanding of the far-reaching implications of biases and risks, it is important that data scientist and analyst in the public sector continue to upskill and build a deeper understanding of its risk and impact.

In addition, there is the question of ensuring scalable processes and technology. You often don't have the budget to invest in the latest tech, so you need to make the most of what you have to optimise output.

Through an innovative mix of lecture-style presentations, interactive group discussion and expert feedback, the **Artificial Intelligence and Machine Learning in Public Sector** training course will focus on 3 core elements of scaling and future proofing AI capability: Systems & Processes, Ethics & Governance and Collaboration.

Not Just a Training Session

- **Understanding** why Artificial Intelligence, and Algorithms Fail and Strategies to Fix it.
- **Improving** the Effectiveness of Your Ethics and Governance Frameworks.
- **Apply Models** to Optimise Purposeful Outcomes at Your Agency.
- **Aligning AI and ML products** with social and business outcomes for optimal impact.

Who Attends

This course is being designed for Data Scientists and Analysts who are working to take their AI capability to the next level by developing products that drive better social and citizen outcomes in public sector. The role of a Data Scientist is one involves a varied skillset and navigating a number of complexities. From working with across functions and business areas and data of varying quality in order to excel one needs not only to keep honing your technical skills, but also have a holistic understanding of the business and the ever-evolving risks of AI. This course has been designed for those data scientists in the public sector, who have to wear a number of hats: technical wizard, business leader and data steward – to empower you to drive better outcomes and create a sustainable AI, ML and data modelling strategy.

Meet Your Facilitator

DR. MAHENDRA SAMARAWICKRAMA
Director
The Centre for Sustainable AI

Dr Mahendra Samarawickrama (GAICD, MBA, SMIEEE, ACS(CP)) is the ACS ICT Professional of the Year 2022; and an accomplished data science leader who actively involved unlocking the power of technology to drive better humanitarian, social and sustainability outcomes. He drives this in his roles as author, academic, inventor and mentor. He holds a PhD in computer science with double Masters in Business Administration and Project Management. He is an industry collaborator who actively leads technology innovation-and-transformation initiatives and partnerships toward humanity, social justice and sustainability. In this role, he is an Advisory Council Member in Harvard Business Review (HBR), an Expert in AI ethics and governance at Global AI Ethics Institute, an industry Mentor in the UNSW business school, a senior member of IEEE (SMIEEE), an honorary visiting scholar at the University of Technology Sydney (UTS), an Advisor for Data Science and Ai Association of Australia (DSAi), and a graduate member of the Australian Institute of Company Directors (GAICD).

He developed the Australian Red Cross AI governance and strategy framework crucial to the business' successful deployment of Data Science and AI capabilities to mobilise the power of humanity. He built the Volunteer Data Science and Analytics team from the ground up, supporting the Australian Red Cross's strategic goals. He helped the business for personalised engagement of customers for disaster resilience in the demanding times of pandemics, natural disasters, and global conflicts. He was also a co-author of the IFRC data playbook and contributed to the data science and emerging technology chapter for AI governance, ethics, and literacy.

Preparation

This workshop is highly interactive with group activities and discussions throughout. Come prepared with some current challenges you are facing in your organisation.

- To participate you'll need:
- A computer with camera and microphone
- Strong internet connection
- Quiet, well-lit space
- Current challenges you are facing

Register Early & Save

Extra Early Bird	Early Bird	Standard Price
8 Passes Available	8 Passes Available	6 Passes Available
$595 + GST	$795 + GST	$995 + GST
Save $400	Save $200	-

CLICK HERE TO REGISTER

*Group Discounts Available - Contact Registration at

registrations@publicsectornetwork.co or Call on **(02) 9057 9070**

Explore the Agenda

Module One – Strategy and Technology

10:00am   **PSN Welcome and Introductions**

10:10am   **Training Overview, Objectives and Outcomes**

10:20am   **Developing a Cohesive, Outcome Driven Roadmap for AI-Powered Transformation**
- Collaborating with business leaders and function leaders to create a sustainable AI and ML strategy
- Future-proofing your AI and ML strategy and technology
- Why do AI and ML products fail and strategies to overcome them

11:00am   **Uplifting your AI and ML Platform for Optimal Social and Business Outcomes**
- Uplifting your technology stack for better AI and ML powered outcomes on a budget
- What are the most common causes of reduced accuracy of AI and why they occur
- Identifying your risk apatite based on Ethics, Bias, Privacy and Impact

11:40am   **Break out Activity**

12:00pm   **Break for Lunch**

Module Two – AI Governance and Ethics

12:30pm   **Applying the KITE model and Wind Turbine model in your Agency to Drive Better Business and Social Outcomes**
- Discussing the benefits and the shortcomings of both models
- Identifying the best uses for these models in your own organisations
- Understanding how these models can mitigate the risks of biases

1:10pm   **Driving better Social and Business Outcomes by Overcoming Biases when Deploying AI**
- Defining the benchmark for Ethical AI practices and identifying the key gaps in your practice
- Strategies and controls to overcome algorithmic biases
- How to create a future proofed, holistic governance and ethics framework

1:50pm   **Q&A with the trainer and wrap up**

2:00pm   **Training Day 1 Close**

Explore the Agenda

DAY 2 - 20 October 2022, 10am - 2pm AEDT
Module Three – AI Projects and Frameworks

10:00am — **PSN Welcome and Recap**

10:15am — **Applying Natural Language Processing and Image Processing to Obtain Valuable Insights**
- Discussing processing techniques to ingest and inspect data
- Applying these techniques to sentiment and social media analysis
- Applying NLP and Image Processes to streamline processes

11:00am — **Embedding AI and Ensuring that it is a Core Competency in your Business**
- A Checklist: The question to ask to ensure your AI and ML products are aligned with business outcomes
- Bridging the communication gap and engaging with subject matter experts within business to drive better outcomes
- How to scale and embed your systems and processes

11:40am — **Breakout Activity**

12:00pm — **Lunch Break**

Module Four – Sustainable AI and AI for Sustainability

12:30pm — **Setting up AI and ML Frameworks for Sustainability**
- Understanding the significance of sustainability in AI and embedding it in your products
- Future proofing and sustainability
- Case Study: Mitigating the risk of Climate Change to First Nations People

1:10pm — **Creating a Proof of Concept**
Applying the learning from the course to create a Proof-of-Concept AI model.

1:50pm — **Summary and Closing Notes from the Trainer**

2:50pm — **Training Day 2 Close**

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