ART OF DECISION COURSE 28-29 JUNE 2023

how to use probability logic and decision inference, for decision-making corporate business leaders, value investors, government agencies and individuals (maths not needed)

11TH CLEANPOWER DINNER 29 JUNE 2023 6-9PM

clean power: secure, affordable



Some past participants in CIR clean power & grids events



EVENTS - 28-29 June 2023, Cambridge

DINNER EVENING It is a pleasure to bring together industrial and entrepreneurial companies in Cambridge,14 years since the first series event and after a long hiatus: Cleanpower 2009. The dinner evening on **29th June 6-9pm** will be the 11th anniversary reunion with fine food, drinks, and surrounds: an informal discussion on *clean energy, affordably and securely provided*. Come and enjoy beautiful Cambridge this summer! Tickets can be secured at the **website** or **shop**.

ART OF DECISION COURSE - This course takes place on **28 and 29 June**, led by Dr J Hayward

We face many decisions in business and life. They seem to come along ever faster. This 2day course for non-mathematician leaders shows how decision-making can be leakproof in logical (Bayes') inference. This leaves only the prior assumptions and motivations for discussion, an approach that maximises success rates, while providing direct, useful information, in the present situation, in each decision. Let's make optimal decisions! Participants will take away practical templates & examples for logical decisionmaking, using tried-and-tested inference.

Leader bio: Dr Hayward has a Ph.D., M.Math and MBA from Cambridge University. The Ph.D was in applied mathematics working as the student of the late Prof Stephen Hawking. It included studies of coherence and information in gravity. Justin worked as a quant in research at a top tier investment house in London, looking at implied probability distributions and optimal strategies for trading securities such as foreign exchange pairs, and on portfolio optimisation in the markets. As a contractor for the past 20 years, he has helped a range of businesses with option prioritisation in strategic decisions, including recently, with the chip design leader, Arm. He has had a passion for and belief in Bayesian methods for a number of years and has created a course to offer this excellent decision making process and method to leaders in a concise and accessible form.



Art of Decision Course 2023

cir-strategy.com/events/new

TRACK RECORD SINCE 2002 - EVENTS and DECISIONS

CIR is the organiser of these two events; it is an independent, contracting business decision company. Based in Cambridge, CIR welcomes you to its summer events.

We aim to help develop your success through insights and meeting people.

CIR was founded in 2002, since when it has been enabling people to meet in 55 conference days, with 4,500 participants, and 525 speakers covering industry, manufacturing, materials, software, circular economy, energy, transport and the built environment. We are ready to deliver this new decision-making course, excited by this development, and a 2023 dinner for the Cleanpower series.

CIR is the home of the High Value Manufacturing, HEAT, SHIFT, Circular Economy, Materials and Graphene, Cleanpower & Smart Grids event series. These series have brought together business, government agencies, inventors with entrepreneurial commercialisers, investors and the supporting business supply chains.



Course Outline

Day 1: Art of Decision, 28 June

Registration and coffee: 10.30 -11.00 am

Session I: 11.00-13.00pm. Introduction, motivation, background

1.00pm-2.00pm Lunch

Session II: 2.00-3.30pm. Basics of Bayes' probability logic

3.30-4.00pm Tea Break

Session III: 4.00-5.15pm. How probability logic works, comparing approaches, examples



6:30pm for 7:00pm Dinner evening! At a College, CAMBRIDGE

Day 2: Art of Decision, 29 June

Session IV: 09.30-11.00am Basics of decisionmaking logic

11.00-11.30am Coffee

Session V: 11.30-1.00pm. Using probability and desirability

1.00-2.00pm Lunch Networking

Session VI: 2.00-3.30pm. Weighing evidence, odds, rational belief, examples

3.30-4.00pm Tea

Session VII: 4.00-5.15pm. Using probability logic in decision-making, examples



5:15pm EVENT CLOSE

*separate Cleanpower Dinner this evening

Course attendee sample job areas: Decision-makers | Corporate directors and officers | CxOs | Chiefs of Staff | VPs | General Managers | Government officials | Public sector agency leaders | Technology leaders | Investors | Senior Strategists in-house | Strategic Compliance Officers | Management accountants | Senior risk managers | Private individuals making decisions



11th Cleanpower Smart Grids dinner

cir-strategy.com/events/new

Art of Decision Course

Who should attend the Art of Decision Course Cambridge, 2023?

Anyone or any organisation:

1. with an interest in making better decisions, attaining fluent decision skills

- 2. wishing to understand the basics of Bayesian probability logic
- 3. believing some of its decisionmaking could be improved in speed and quality
- 4. with a specific decision challenge
- 5. whose executives would like to understand the underpin to ML/AI/ChatGPT etc

6. wishing to understand how Bayesian approaches stack up against frequentist approaches

7. wanting to make the best rare, high-stakes, high uncertainty decision

8. planning to build in skills, process and consistency to decisions

- 9. seeking to understand their culture better through decisionmaking
- 11. trying to pull together different groups of stakeholders in decisions

12. wishing to have a highly-productive learning experience outside the office in pleasant surrounds

Mathematics is not a prerequisite. You can buy tickets now and find out more on the **website**

Quotes

"We use Bayesian subjective probability methods about 3% of the time and this gives us a strong competitive advantage." CxO Lucida Technology in 2023

"...the record is clear; orthodox arguments against Bayes, and in favour of confidence intervals, have never considered such mundane things as demonstrable facts concerning performance." Professor E Jaynes, 1978

"In the long run, Bayesian decisionmaking wins.' W Feller, 1950



Who should attend the Cleanpower Smart Grids dinner 2023?

Anyone or any organisation:

1. with an interest in solving the complex problem of clean power that is secure and affordable

2. wishing to discuss barriers to adoption and use of energy technology

3. on a science and technology watching brief for cleanpower and grids

4. with a startup or entrepreneurial idea or a relevant product to market

5. with business problems to solve that might be influenced or helped by new inputs and/or state-of-the-art solutions in the sector

6. wishing to understand the full up-to-date and prioritised range of applications and those nearer to and further from market & key market actors

7. wanting to get a general update on power generation, storage and grids

8. planning to meet new industrial and business entrants into the smart grids & generation and storage

9. wanting to build good networks in this field

10. wishing to be part of the future direction of a long-running series

This will be the 11th 'annual' CPSG event, the previous 10 were full 2-day conferences.



Tickets can be secured quickly via our **multi-ticket shop here** and find out more at the **website**

£300 plus vat /nt

Total

Booking & pricing (see also online form)

Date	Venue	Fee per delegate	Total fee (incl VAT)
	& 29 June 2023 Camb 29 June 2023 Cambrid	-	
Cleanpower Dinner		age on	
Art of Decision (A	AD) Course (2-day)	with/out Hotel	£2999/2699 plus vat
Cleanpower 2023	B Dinner with Hotel		£475 plus vat
Cleanpower 2023	B Dinner no Hotel		£150 plus VAT

2

3

4

Additional hotel nights required

Circle the number of attendees 1

Registration instructions Participant details:

Personal Title:	First Name*:
Last Name*:	Job Title:
Email*:	Direct Tel:
Mobile*:	Company Affiliation:
Address:	City:
Post Code:	Switchboard number:
Accounts Contact:	Accounts Tel:

Please tick one of the following options, complete the details where required and return the form with your application form as soon as possible. Please ensure you sign the bottom of the form indicating that you allow us to take payment and accept your place/s at this CIR Event.

Option 1 Please send me an Invoice____ Option 2 I wish to pay by credit card____

Type of card: Visa MasterCard Other	We also accept cheques,
Name on card:	bank transfer & online
Billing address of cardholder:	card payments, please do
	this via http://www.cir-
	strategy.com/events/new
Credit card number:	

Issue number (if applicable):	Security number: (last three digits of the long number at the back of the card)
Valid from date:	Valid to date:
M M Y Y	M M Y Y
Print name:	
Signature:	Date:
Contact information In order to confirm attendance, please en	nail (with a picture of this page) <u>events@cir-strategy.com</u>
Participation gives you Access to event activities Any materials	printed All lunches, dinners, breaks, receptions Any certifications

Payment terms

One calendar month from the date of invoice, but prior to event, participant substitutions allowed at any time. The booking conforms to CIR's Terms and Conditions of bookings, which are available on request & on website.

Data Protection: We follow UK law and do not share data with other organisations.

2023 Course Leader: Dr J Hayward

Profile

Justin is a director of CIR Ltd, a company, with a network of associates, that he founded in 2002 to provide strategic decision-making to organisations.

CIR has created and run 55 conference days in manufacturing, energy, materials and software technologies 2002 - 2019.



Background and interests

Dr Hayward has a Ph.D., M.Math and MBA from Cambridge University. The Ph.D was in applied mathematics and included studies of coherence in quantum gravity. He is a senior member of King's College.

He worked as a quant in research at a top tier investment house in London, implementing implied probability distributions from trader data and optimal strategies for trading securities such as foreign exchange currency pairs, and on portfolio optimisation in the bond markets.

He took an MBA at the Cambridge Judge Business School which had modules in statistics, but which focused on frequentist methods.

As a contractor for the past 20 years, he has helped a range of businesses with option prioritisation in strategic decisions, including for example with the chip design leader, Arm. He has had a passion for and belief in Bayesian methods for a number of years and has created a course to offer this excellent decision making process and method to leaders in a concise and accessible form.

Justin enjoys watching his issue play cricket; and running, cross-country & alpine skiing and hiking, and playing snooker.

Course

Justin will lead the Art of Decision course, as outlined above, in seven sessions, over two days with a dinner evening after the first day's sessions.



We look forward to seeing you at Art of Decision Course and/or the Cleanpower Smart Grids Dinner

this Summer 2023 in Cambridge

cir-strategy.com/events/new jhayward@cir-strategy.com +44 (0)1223 303500 CIR, ideaspace, Cambridge CB3 0GT