TABLE OF CONTENTS

DATA & AI

ART AND ARTIFICIAL INTELLIGENCE

After a brief introduction to artificial intelligence (AI), its role in our daily lives and current scientific research on the subject, participants discover that this technology can be used to create works of art. The various stages in the design of artificial intelligence are covered: data collection and preparation, training and finally evaluation of the AI. Through presentations and hands-on activities, this workshop highlights the importance of data and how it can be used to train intelligent machines. It also enables participants to form their own opinions on artificial intelligence and understand the impact on our society of new tools such as ChatGPT.
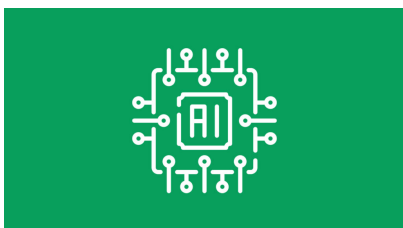
View online
Price: 12,00 €
Start date: 17.04.2024
Instructor(s): Régine POUSSIN
Language: English
Difficulty: Beginner

COMPUTER VISION - ARE COMPUTERS BLIND?

After a brief introduction to the state of art of computer vision, you will be given get a clear picture of what a computer actually sees. How is a digital image created and processed by a computer? You will then dive into the basics of computer vision to understand how a computer could recognize a number in an image by looking for some of its characteristics (or features). This will lead to the use of neural networks in the field of computer vision. A simple yet accurate explanation of neural networks such as perceptrons, convolutional neural networks and haar features will be provided.

View online
Price: 8,00 €
Start date: 24.04.2024
Instructor(s): STAMMET, Christophe
Language: English
Difficulty: Beginner

DEMYSTIFYING IT CAREER PATHS

The course will cover various IT paths and career opportunities, explaining how the DLH can assist participants eager to pursue an IT career. Participants will gain insights into the roles, responsibilities, and skills required for various IT positions, as well as the latest trends and technologies shaping the industry. This course is ideal for students, career changers, and professionals looking to navigate and succeed in the dynamic world of IT.

View online
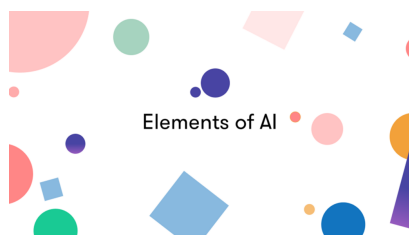**Price:** 16,00 €
Start date: 29.03.2024
Instructor(s): Chakib Senhadji
Language: English
Difficulty: Beginner

ELEMENTS OF AI - DLH SUPPORT GROUP

The DLH offers a voluntary support group for people who have signed up for the online course "Elements of AI" developed by MinnaLearn and the University of Helsinki.

Elements of AI is a free Massive Open Online Course (MOOC) designed to encourage a broad group of people to learn what AI is, what you can (and cannot) do with AI, and how to start developing AI methods.
The MOOC combines theoretical and practical exercises and can be taken at your own pace.

Register for the MOOC

DLH SUPPORT GROUP
The DLH offers 3 face-to-face sessions where participants meet at the Digital Learning Hub with two experienced AI trainers.

The aim of the support group is to:

- Review the content of the MOOC
- Discuss use cases such as:
    - How does AI improve the efficiency of your company?
    - How are Convolutional Neural Networks used in the robotic industry?
- Hold Q&A sessions

Webinars
In addition to the MOOC itself, the University of Luxembourg Competence Centre organizes webinars to give complementary presentations on each of

the chapters covered in the MOOC.

If you wish to participate in this support group, it is necessary to register by clicking on "Add to cart" below.
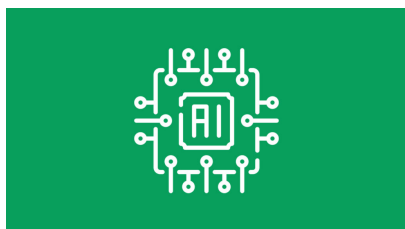
View online
Price: 0,00 €
Start date: 13.05.2024
Instructor(s): Mr. Chakib Senhadji and Dr. Daniela Gierschek
Language: English
Difficulty: Beginner

HOW TO COPE WITH THE FUTURE AI ACT

If assisted tools are acknowledged to improve process of organisations, there are also growing concerns about their embedded algorithms which remain biased. Like previously with General Data Protection Regulation (GDPR), companies will have to comply with an upcoming EU regulation relating to their use of AI assisted systems in order to prevent the perpetuation of historical patterns of discrimination (e.g., against women, certain age groups, persons with disabilities, or persons of certain racial or ethnic origins or sexual orientation).

This training will help organisations cope with the future AI Act. To learn more about this regulation: https://artificialintelligenceact.eu/

View online
Price: 16,00 €
Start date: 14.11.2024
Instructor(s): Marie Gallais
Language: English
Difficulty: Intermediate

IA, ÉTHIQUE ET SOCIÉTÉ - COMMENT VIVRE ET DÉVELOPPER L'IA

L'intelligence artificielle (IA) représente l'un des domaines du monde numérique qui fait actuellement l'objet d'un développement important partout dans le monde. Cela signifie que les citoyens sont et seront confrontés, dans leur vie professionnelle et personnelle, à des produits numériques qui incluent des composants d'intelligence artificielle.

Cette formation aborde de façon claire, pratique et avec de nombreuses interactions avec les participants, les notions clefs de l'IA et de étudie son impacte sur l'emploi et l'éthique des sociétés.

[View online](#)
Price: 28,00 €
Start date: 27.03.2024
Instructor(s): Prof. Dr. GUELFI, Nicolas
Language: French
Difficulty: Beginner

INTRODUCTION APPLIQUÉE À L'INTELLIGENCE ARTIFICIELLE POUR LE CITOYEN

L'intelligence artificielle (IA) représente l'un des domaines du monde numérique qui fait actuellement l'objet d'un développement important partout dans le monde. Cela signifie que les citoyens sont et seront confrontés, dans leur vie professionnelle et personnelle, à des produits numériques qui incluent des composants d'intelligence artificielle. Cette formation aborde de façon claire, pratique et avec de nombreuses interactions avec les participants, les notions clefs de l'IA et de l'apprentissage profond qui se développent à grande vitesse de nos jours.

[View online](#)
Price: 56,00 €
Start date: 23.04.2024
Instructor(s): Prof. Dr. GUELFI, Nicolas
Language: French
Difficulty: Beginner

**Digital
Learning
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JOURNEY TO AI AND CHATGPT

In this journey, the learner gets an overview the history of AI, its ups and downs, a glimps behind the scene how it works and how an AI system can be used in daily life. Some AI systems are analysed to provide precise illustrations on the opportunities and limitations of AI. ChatGPT is studied more in detail, how prompting helps to fully profite of this chatbot and how similar AI systems may help us in our professional work.

View online
Price: 12,00 €
Start date: 13.06.2024
Instructor(s): Dr Serge Linckels
Language: English
Difficulty: Beginner

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View online
Price: 12,00 €
Start date: 26.09.2024
Instructor(s): Dr Serge Linckels
Language: English
Difficulty: Beginner

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View online
Price: 12,00 €
Start date: 28.11.2024
Instructor(s): Dr Serge Linckels
Language: English
Difficulty: Beginner

MASTERING CHATGPT AND PROMPT ENGINEERING TO UNLEASH YOUR PRODUCTIVITY AND CREATIVITY

This course about ChatGPT and prompt engineering is aimed at students who have an interest in AI language models. It's especially valuable because it offers skills that can be used in real world situations, and it's created for all, from beginners to those with more experience.

The learning journey begins with simple prompt engineering, a vital part of AI communication. They'll get to understand the basic rules of prompt engineering, delve into how ChatGPT operates, and discover how to apply these skills to their individual projects.

The course's main goal is to ensure students truly understand prompt engineering. At the end of the course, students should be capable of using this newfound knowledge creatively in their own work. The aim is to show students how to use ChatGPT efficiently for their own needs.

The teaching approach is practical and interactive, offering step-by-step instructions and real-life scenarios.

View online
Price: 12,00 €
Start date: 25.04.2024
Instructor(s): Julien Carosi
Language: English
Difficulty: Beginner

Digital Learning Hub_

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View online
Price: 12,00 €
Start date: 28.05.2024
Instructor(s): Julien Carosi
Language: English
Difficulty: Beginner

PERSONAL DATA AND INFORMATION SECURITY – LEGAL STAKES AND NEW EU RULES

This course provides you with an introduction to the requirements of the General Data Protection Regulation (GDPR), how to comply and demonstrate compliance, how to address practical issues, and how to embed data protection into operations.

View online
Price: 16,00 €
Start date: 17.04.2024
Instructor(s): TOME, Michaël
Language: English
Difficulty: Beginner

PERSONAL DATA AND INFORMATION SECURITY – LEGAL STAKES AND NEW EU RULES

This course provides you with an introduction to the requirements of the General Data Protection Regulation (GDPR), how to comply and demonstrate compliance, how to address practical issues, and how to embed data protection into operations.

View online
Price: 16,00 €
Start date: 19.06.2024
Instructor(s): TOME, Michaël
Language: English
Difficulty: Beginner

Digital Learning Hub_

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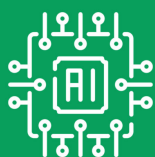
[View online](#)
Price: 16,00 €
Start date: 02.10.2024
Instructor(s): TOME, Michaël
Language: English
Difficulty: Beginner

UTILISATION ET SPÉCIALISATION DE GRANDS MODÈLES DE LANGUES COMME CHATGPT

Les chatbots basés sur de grands modèles de langue (LLM) construits à l'aide de réseaux de neurones transformateurs tels que ChatGPT jouent un rôle croissant dans la société, grâce à leur bonne capacité à générer des textes, des images, des sons et des vidéos de type humain. Ils sont/peuvent/seront utilisés dans divers domaines tels que : le service client, les assistants personnels, l'éducation, la santé, l'accessibilité, la création de contenu, le divertissement et bien plus encore.

Cependant, si les chatbots basés sur les LLM offrent de nombreux avantages, il existe également des risques et des défis potentiels. Il s'agit notamment du risque de générer des contenus inappropriés ou préjudiciables, des difficultés à comprendre le contexte, des difficultés à fournir des informations exactes et des préoccupations concernant la confidentialité et la sécurité des données. Les considérations éthiques sont cruciales à mesure que ces technologies continuent de se développer et de s'intégrer de plus en plus dans la société.

[View online](#)
Price: 56,00 €
Start date: 19.03.2024
Instructor(s): Prof. Dr. GUELFI, Nicolas, DE JESUS SOUSA , Tiago
Language: French
Difficulty: Beginner