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DATA & AI

AI & ETHICS

This course is designed to deepen participants' understanding of AI and its ethical dimensions, equipping them to consciously and responsibly navigate the challenges and opportunities AI technologies present. We use interactive tools in an engaging environment with hands-on activities that promote learning by doing. Participants are encouraged to develop AI projects aimed at solving real-world problems, with an emphasis on incorporating ethical principles to create inclusive and ethical AI solutions.

Spanning three days, the course begins with a comprehensive introduction to AI, including machine learning, deep learning, and their applications, and explores the future prospects of AI technology. On the second day, we delve into AI ethics, where participants propose projects, examine the roles of different stakeholders in AI, and learn about AI development tools. The final day focuses on fairness, bias, and explainable AI (XAI), concluding with participants reflecting on and presenting their projects, considering the ethical aspects learned throughout the course.

[View online](#)
Price: 48,00 €
Start date: 08.07.2024
Instructor(s): SHOJAEE Nooshin
Language: English
Difficulty: Beginner

DÉCOUVERTE DU DATA WAREHOUSE : CONCEPTS, MODÉLISATION, ALIMENTATION (ETL) ET RESTITUTION

L'analyse des données est un processus qui permet d'analyser les performances d'une entreprise, qu'elles soient passées, présentes ou futures, et aide les décideurs à prendre des actions éclairées. Dans le cadre de ce processus d'analyse, les organisations passent par trois étapes. Premièrement, elles collectent des données à partir de systèmes informatiques opérationnels et de sources externes. Deuxièmement, elles transforment et préparent ces données pour l'analyse. Troisièmement, elles exécutent des requêtes sur ces données et créent des visualisations de données, c'est-à-dire des tableaux de bord Business Intelligence (BI) et des rapports pour mettre les résultats analytiques à la disposition des utilisateurs pour une prise de décision

optimale. L'objectif de cette activité étant de prendre les meilleures décisions est de permettre aux entreprises par exemple d'augmenter leurs revenus, d'améliorer leur efficacité opérationnelle et d'obtenir des avantages concurrentiels par rapport à la compétition.
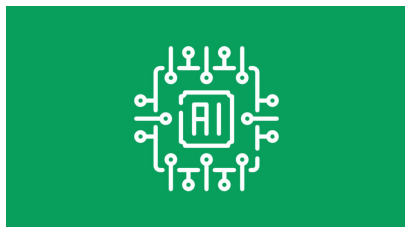
[View online](#)
Price: 96,00 €
Start date: 13.11.2024
Instructor(s): Gaioni, Damien, Abboud, Georges
Language: French
Difficulty: Beginner

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

INTRODUCTION À L'ÉMERGENCE DE L'ANALYSE DE DONNÉES

Le cours "Introduction à l'émergence de l'analyse de données: Comprendre l'avènement des systèmes d'information d'aide à la décision" explore l'histoire et l'importance de l'analyse de données dans les systèmes d'information d'aide à la décision, retraçant son évolution depuis le traitement de données de base jusqu'à l'utilisation sophistiquée des mégadonnées et de l'IA dans les pratiques commerciales contemporaines. À travers un mélange d'aperçus théoriques, d'études de cas pratiques et de projets pratiques, les étudiants exploreront le développement et l'application des systèmes d'aide à la décision, acquérant une maîtrise des techniques d'analyse de pointe telles que l'apprentissage automatique et l'analyse prédictive. Ce programme complet équipe les apprenants des compétences nécessaires pour analyser les données de manière critique, développer des idées exploitables et exploiter les systèmes d'information pour une prise de décision éclairée, les préparant à des carrières réussies dans le domaine dynamique de l'analyse de données et de la Business Intelligence.

View online
Price: 32,00 €
Start date: 13.11.2024
Instructor(s): Gaioni, Damien, Abboud, Georges
Language: French
Difficulty: Beginner

INTRODUCTION AUX DIFFÉRENTS OUTILS DE REPORTING

Le cours "Introduction aux Différents Outils de Reporting" est conçu pour initier les apprenants à la gamme d'outils de reporting disponibles sur le marché pour la visualisation des données à partir d'un entrepôt de données ou d'un datamart. À travers une combinaison de conférences, d'ateliers pratiques et d'études de cas réels, les apprenants exploreront les fonctionnalités, les avantages et les applications pratiques de différents outils de reporting. Ce cours vise à doter les participants des compétences nécessaires pour sélectionner et utiliser l'outil de reporting le plus approprié pour visualiser et interpréter les données, renforçant ainsi leur capacité à prendre des décisions éclairées basées sur des ensembles de données complexes. À la fin du cours, les apprenants auront une compréhension approfondie de la manière de communiquer efficacement les informations tirées des données à travers des visualisations convaincantes, les préparant ainsi à des rôles nécessitant une expertise en intelligence d'affaires et en analyse de données.

View online
Price: 32,00 €
Start date: 27.11.2024
Instructor(s): Gaioni, Damien, Abboud, Georges

Language: French
Difficulty: Beginner

INTRODUCTION AUX OUTILS ETL

Le cours "Introduction aux Outils ETL: Apprenez à connaître les outils ETL disponibles sur le marché pour alimenter un entrepôt de données/datamart " est conçu pour familiariser les étudiants avec les technologies essentielles de l'Extraction, de la Transformation et du Chargement (ETL), qui sont fondamentales dans la construction d'un entrepôt de données ou d'un datamart. À travers des conférences théoriques, des démonstrations pratiques et des exercices appliqués, ce cours offre un aperçu complet des outils ETL disponibles sur le marché, en mettant l'accent sur leurs fonctionnalités, leurs caractéristiques uniques et leurs applications réelles dans le domaine de l'intelligence d'affaires. Les participants apprendront comment ces outils aident à intégrer les données provenant de différentes sources, à les transformer selon des besoins spécifiques, et à les charger dans des entrepôts de données pour une analyse approfondie. Ce programme est parfait pour ceux qui cherchent à maîtriser les pratiques modernes de gestion des données et à améliorer les processus de prise de décision dans un environnement professionnel.
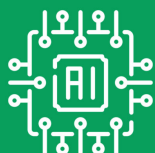
[View online](#)
Price: 32,00 €
Start date: 20.11.2024
Instructor(s): Gaioni, Damien, Abboud, Georges
Language: French
Difficulty: Beginner

INTRODUCTION TO DEEP LEARNING FOR ARTIFICIAL INTELLIGENCE

In an era where artificial intelligence (AI) is at the forefront of technological and economic advancement, understanding its intricacies has become crucial for professionals across various sectors. This intermediate-level course aims to equip participants with a comprehensive understanding of deep learning, a pivotal branch of AI responsible for significant breakthroughs in the digital world. Targeted at any individuals with a basic understanding of Python programming and mathematics, the training seeks to demystify the scientific and technological foundations of deep learning, including linear algebra, calculus, and software engineering, alongside practical skills in using deep learning frameworks like PyTorch and Keras.

The course covers essential concepts from the basics of neural networks, activation functions, and data handling, to the application of various architectures like ANNs, CNNs and Transformers. It emphasizes hands-on learning through exercises, projects, and interactive discussions, ensuring participants can design, implement, and refine neural networks effectively. Moreover, it addresses the social and ethical dimensions of AI, preparing attendees to make responsible decisions in AI deployment or use. This blend of theoretical knowledge and practical application, set in an on-site format conducive to immersive learning, makes the course an invaluable opportunity for those looking to deepen their expertise in AI or integrate AI solutions into their work, fostering a future-ready skill set in the rapidly evolving landscape of artificial intelligence.

This course will cover:

- Scientific and technological foundations
- Basic concepts of deep learning
- Main architectures of deep learning
- Mini-Project - Applying the learned concepts
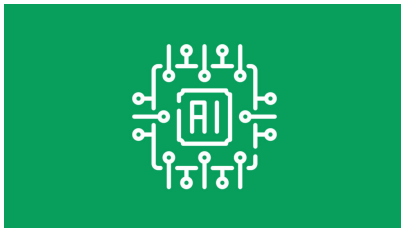- Ethics and society - Organizing to live with AI

[View online](#)
Price: 84,00 €
Start date: 13.06.2024
Instructor(s): Prof. Dr. GUELFI Nicolas
Language: English
Difficulty: Intermediate

INTRODUCTION TO R PROGRAMMING LANGUAGE

This course offers a detailed exploration of R programming covering syntax, data types, data structures, control structures, and statistical analysis. Participants will engage in hands-on exercises to apply R in practical scenarios, enhancing their data manipulation and visualisation skills.

[View online](#)
Price: 84,00 €
Start date: 23.09.2024
Instructor(s): David Ferns
Language: English
Difficulty: Intermediate

Digital Learning Hub_

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

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: 26.09.2024
Instructor(s): Dr Serge Linckels
Language: English
Difficulty: Beginner

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: 28.11.2024
Instructor(s): Dr Serge Linckels
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.
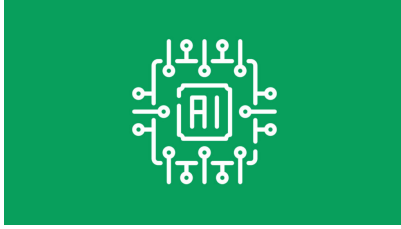
View online
Price: 16,00 €
Start date: 02.10.2024
Instructor(s): TOME, Michaël
Language: English
Difficulty: Beginner

PROBABILITY FOR DATA SCIENCE

The course will first focus on probability distributions, covering measures of central tendency (mean, median, and mode), variance, skewness, kurtosis, and the concept of expected value. Visual tools for data description and distribution visualization will also be introduced. In a second part, we will delve into the probability distribution of multivariate random variables, exploring joint distribution, marginal distribution, conditional distribution, and covariance.

[View online](#)
Price: 36,00 €
Start date: 24.06.2024
Instructor(s): Prof. Dr. Ivan Nourdin
Language: English
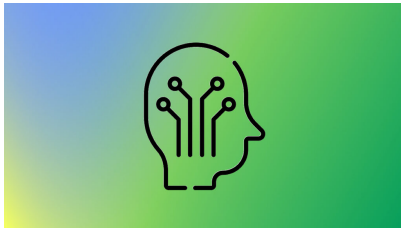**Difficulty:** Beginner

TABLEAU ANALYTICS PLATFORM

This learning track encompasses the fundamental concepts and techniques for working with the complete Tableau Analytics Platform, which includes Tableau Desktop, Tableau Cloud, Tableau Server and Tableau Prep.

The courses are designed for individuals who are new to Tableau or have some experience. It caters to anyone who deals with data, regardless of their technical or analytical expertise.

Whether you're a data analyst, data scientist, or an individual just starting with Tableau (or even someone comfortable with Excel), this course will help you get up to speed. You'll learn essential skills for analyzing data in Tableau, including connecting to data sources, customizing data, creating visualizations, and building interactive dashboards.

[View online](#)
Price: 84,00 €
Start date: 20.06.2024
Instructor(s): Albrecht, Steve
Language: English
Difficulty: Intermediate

TABLEAU CREATOR - INTERMEDIATE

This two-day course has been specifically designed for individuals who already possess a good level of proficiency in using Tableau and are eager to enhance their skills further.

It is required that you have either completed the 'Tableau Creator – Fundamentals' course or have a minimum of three months of experience using Tableau.

Prior to beginning this course, it is essential that you possess knowledge of how to establish a connection to data, create visualizations by utilizing fields on shelves and the marks card, filter, and sort data, as well as construct a dashboard. It is important to note that this course caters to individuals who are using Tableau Desktop (compared to web authoring).

You will learn how to effectively restructure data by using Data Interpreter, pivots, and splits. Furthermore, you will gain a deeper understanding of data sources, including how to replace them, employ relationship and join calculations, and create unions using wildcard searches.

Specifically focusing on challenges associated with blended data, you will receive valuable guidance on selecting the most appropriate method for combining data.

To enhance your filtering skills, you will learn how to use advanced filtering techniques to analyse subsets of data and filter across multiple data sources within a dashboard. Additionally, you will develop analytical capabilities by aggregating dimensions in calculated fields, customizing table calculations, and using level-of-detail (LOD) expressions to perform complex analysis.

To achieve more advanced analytics, you will be introduced to creating advanced parameters and displaying data trends and forecasts.

In relation to using geographical maps, you will discover the advantages of employing marks layers to present a greater amount of data. Furthermore, you will become familiar with best practices for selecting and formatting map types, as well as using background layers.

In terms of creating robust and customized dashboards, you will learn how to develop navigation buttons, use layout containers, and create personalized colour and shape palettes.

Lastly, you will become proficient in managing the content you have published, which includes data sources, extracts. You will gain knowledge on how to create subscriptions and set alerts on published views that you wish to track.

[View online](#)
Price: 64,00 €
Start date: 02.07.2024
Instructor(s): Albrecht, Steve
Language: English
Difficulty: Intermediate