Introduction et programme du module

Cours M2 CCN

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Modélisation des problèmes scientifiques

2019/2020

Organisation

Cours:

- 3 séances de 4h, plutôt pratiques

Notation:

- Tp noté (à m'envoyer par mail 15 jours après le dernier cours)

Ressources:

https://github.com/llesoil/modelisation_des_problemes_scientifiques-/

Contact:

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Contenu du module

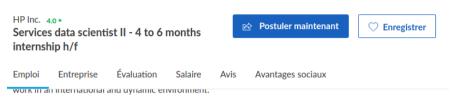
Contenu:

- Traitement des données
- Statistiques descriptives
- Visualisation
- Méthodes statistiques simples

Le cours devrait vous permettre de charger, traiter et expliquer les données à l'aide de python.

Pré-requis ; syntaxe de base de python, jupyter notebook, notion sur les bases de données

Pour continuer; Méthodes statistiques avancées, machine learning, big data



Key Job specifics/responsibilities

Conduct advanced data analysis in a support and services environment using advanced techniques in order to highlight and to discover unexplored area of focus to improve HP agility and efficiency. In particular it is expected

- To ensure clean data to build new data analytical models
- To deal with large dataset using big data and real time processing to deliver advanced financial analysis
 or cost modeling
- To use statistical methodologies (Regression, Forecasting,), analytical tools (Clustering, Basket analysis, Decision trees, Random forest etc.) to
- To access data using SQL and building efficient data architecture
- To be expert in developing advanced analysis tools utilizing Advanced Excel, Visual Basic for Applications (VBA) in Excel and other MS Office applications
- · To develop user interface based on tableau or PowerBI in order ease data access and data analysis
- Finally share clearly analysis outcome by adapting to the audience. Explain simply the complex. Gain trust & confidence by sharing details without losing your stakeholders.

Skills (procedures and documents the employee has to be acquainted with)

- · SQL, DB knowledge
- · Big data and real time analytics
- SPARC
- Power BI and Tableau programming, other visualization tools
- R Python, Numpy, Pandas, Matplot, Sci Kit learn
- · Advanced knowledge of Excel and Access (Arrays, VBA etc.)

Other skills needed

Un exemple d'offre d'emploi typée 'data scientist'

Des questions?

Sinon on commence avec le TP1 sur numpy!:)