

From Data Analyst to Data Scientist

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From Data Analyst To Data Scientist

	Data Analyst	Data Scientist
Technical Skills	Analytical thinking	Excellent math and statistics knowledge
	DBMS / Data Modeling	DBMS / Data Modeling
	Operation of tools (market analysis tools)	Data Mining
	Apply proven analysis processes	Visualization
	Programming knowledge advantageous but not necessary	Development of algorithms (front-to-end-solutions) Methodical abstraction of algorithms
Business Skills	Detailed domain knowledge	Subject-related background knowledge - interdisciplinary
	Project management	Creativity, ideas: "finding the needle in a haystack"
	Strong communication skills	Strong communication skills - "Data Science Teams"

Plus: New challenges:

- Legal regulations
- Ethical aspects
- Data Governance

Adapted / supplemented, source: "Assessing the demand for Big Data and Analytics Skills 2013 – 2020"
(Forfás, 2014)

The WU Executive Academy Data Science Program



Module 1

- Overview and case studies from different application domains (e.g. Marketing, Supply-Chain/Production Management, Process Management, Finance)
- Data Processing and Data Analytics: Concepts & Methods
- Selected case studies in depth

Module 2

- Data Science project kick-off
- **Legal and ethical foundations and data security**
- **Big Data methods and algorithms**
- **Data workflows, distribution, advanced techniques (e.g. Semantic Technologies, text extraction)**
- Commercial Data Science Tools Fair
- Advanced Data Analytics

Module 3

- Data processing and data analytics trends and outlook
- Application of Data Science
- Special guest talks by distinguished academic Speakers and experienced experts from practice
- Data Science project presentations

Academic Director:
Prof. Axel Polleres

Duration:
Part-time, over 5 months
(12 days, 3 modules)

Venue:
Vienna

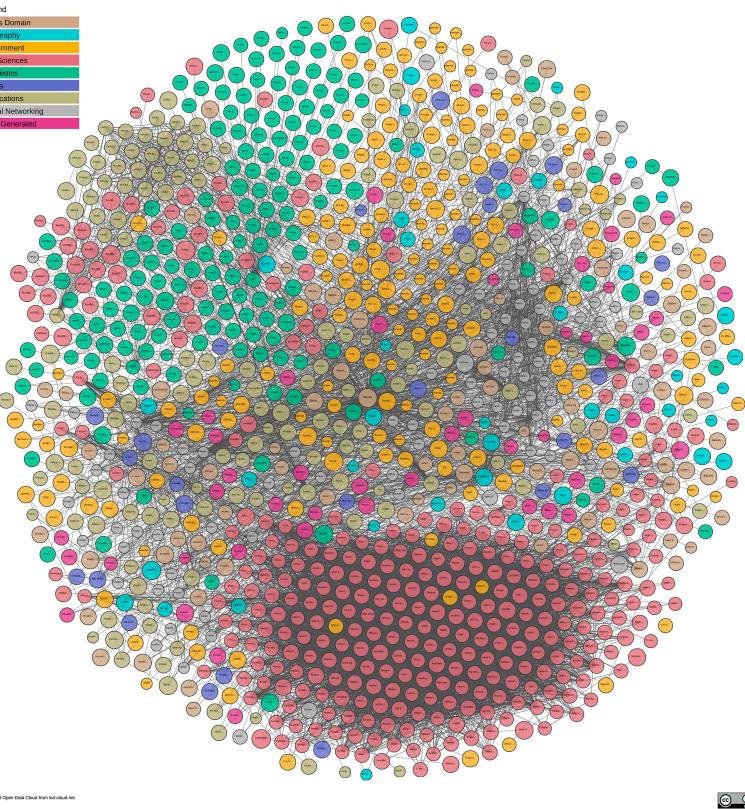
Language:
English

Tuition Fees:
Early Bird Price: € 10,830
until June 30, 2018
Regular Price: € 11,400
Reduced fee for members of
WU Alumni Club/WU
Executive Club: € 10,260
Reduced fee for members of
IOÖ: € 10,850

Cooperation Partner:

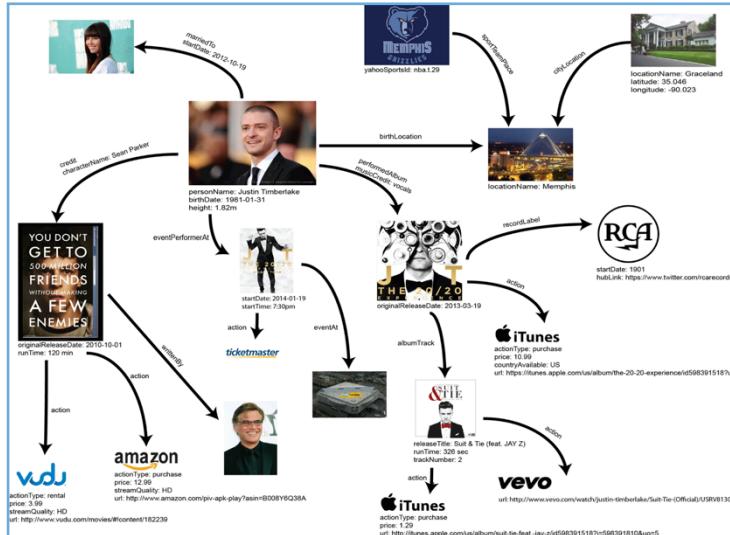


Where Data Science meets the Semantic Web



The Linked Open Data Cloud from lod-cloud.net

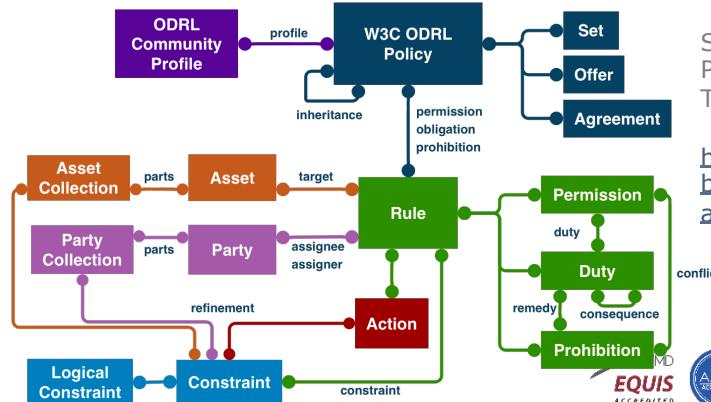
SOURCE: The Linked Open Data Cloud
<https://lod-cloud.net/>



SOURCE: WHAT HAPPENED TO THE SEMANTIC WEB?
PETER MIKA, KEYNOTE AT ACM HYPERTEXT, JULY 5, 2017

<https://www.slideshare.net/PMIKA/WHAT-HAPPENED-TO-THE-SEMANTIC-WEB>

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SOURCE: ODRL: A PATH WELL TRAVELED

<https://www.w3.org/blog/2018/02/odrl-a-path-well-travelled>



Highly Interdisciplinary and Interactive

Production
Management



Lectures/
Foundations



Interactive
assignments/
Tools



Data Science Lab:
Team-Work, Data
Coaches



Individual
Module
preparation



Business Process
Management

Knowledge
Transfer



Project
Presentations



Tutorials/Fairs



Practice
Discussions

Information
Business

Mathematics & Statistics

Marketing

Methodological mix

For additional information



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