DR JAN AERTS

DATA GOVERNANCE AND VISUALISATION EXPERT

PROFILE

Jan Aerts is driven by the ambition to help organisations and individuals gain deep understanding of their data. This includes describing what that data actually is and organising it in such a way that provenance can be maintained across the data lifecycle. In addition, he aims to help those organisations and individuals see their data *in context* so that better decisions can be made, by using data visualisation, visual analytics and dashboarding.

IN BRIEF

- +20 years experience in Data Management and Governance; expert in Data Visualisation and Visual Analytics
- +10 years teaching experience at Master level (including molecular biology, data management, data visualisation)
- Performed data integration in large international whole-genome sequencing projects
- Supervised a team leading to several awards on the topic of data visualisation and visual analytics
- >100 scientific publications (see https://orcid.org/0000-0002-6416-2717)
- Language skills: fluent in English and Dutch, intermediate level of French, elementary level of German
- Master in Bioscience Engineering
- PhD in Animal Sciences

COMPETENCES

- Data Management and Governance (incl data modelling, relational and NoSQL databases, data quality, provenance, stewardship, integration across whole data cycle)
- Data Visualisation and Visual Analytics (novel visual design for complex data, dashboards)
- Brainstorming methodologies
- Training in above topics
- Group leadership
- Top-level view on how the above affect an organisation or project

ACHIEVEMENTS

- **Set up Data Science Institute at Hasselt University**
  Jan Aerts took the lead in developing the vision and mission of the Institute, as well as in writing the first strategic plan. Acted as the Institute's first Director.
- **Developed master Data Governance Strategy for large Clinical Research Organisation**
  Jan Aerts identified data risks and conceptualised the first high-level data governance strategy for a large international organisation
- **Visual Analytics Awards**
  Together with the group he leads, Jan Aerts has won multiple awards in visual analytics and data visualisation contests, including at the Visual Analytics in Science & Technology (VAST) conference and Bio+MedVis competition.
- **Scientific excellence**
  More than 100 scientific publications on the topics of (amongst others) data management and visual analytics (https://orcid.org/0000-0002-6416-2717)
- **Novel data dimensionality reduction algorithm**
  Jan Aerts supervised the development of a novel method for dimensionality reduction (Simplified Topological Approximation of Data) which allows for including domain-specific knowledge

EXPERIENCE

Amador Bioscience 2022	**Hasselt, Belgium** Developed Data Governance Strategy and advised on data automation workflows
Hasselt University 2019-Present	**Guest Professor, Hasselt, Belgium** Leading a research group focussing on visual analytics for dimensionality reduction and inter-expert communication
Hasselt University 2019-2022	**Director Data Science Institute, Hasselt, Belgium** Set up the Institute, bringing together >120 people
Leuven University 2010-2019	**Professor, Leuven, Belgium** Lead a research group focussing on data management and visual analytics, mainly in the life science and omics domains
Welcome Trust Sanger Institute 2008-2010	**Senior Bioinformatician, Cambridge, UK** Data management, analysis and visualisation in pioneering large-scale genome projects
Roslin Institute 2005-2008	**Bioinformatician, Roslin, UK** Data management and analysis in large-scale (>50 laboratories) cattle genome sequencing project

Wageningen University 2001-2005	**Doctoral researcher, Wageningen, Netherlands** Data management and analysis in large-scale (>40 laboratories) chicken genome sequencing project
Johnson & Johnson 1999-2001	**Data Management Analyst, Beerse, Belgium** Development of clinical trial database schemas, data cleaning, data analysis

EDUCATION

KU Leuven 1999-2000	**Advanced Studies in Cellular Biotechnology, Leuven, Belgium**
KU Leuven 1992-1996	**BSc & MSc Bioscience Engineering, Leuven, Belgium**

CONTACT

Rue Duchene 4, Beauvechain

+32 487025918

jan.aerts@belvis.io

http://belvis.io

https://linkedin.com/in/jandot