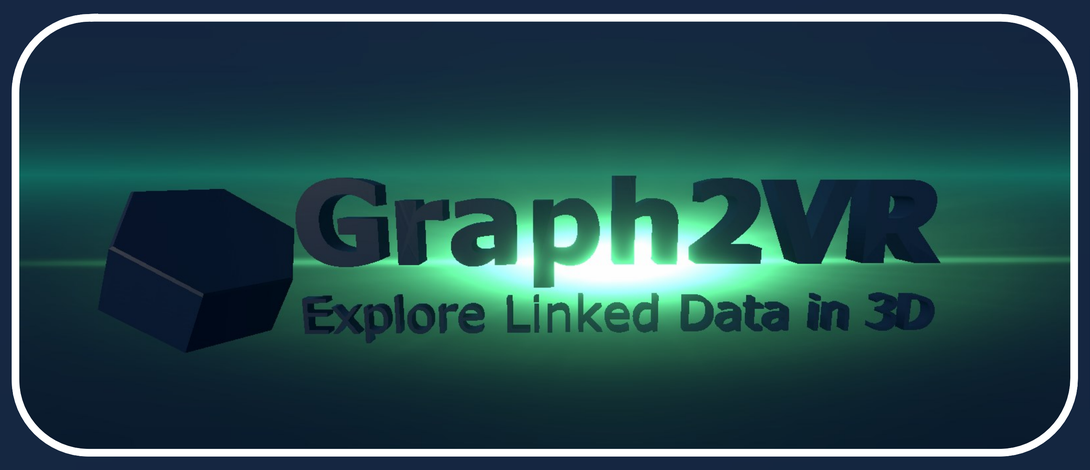
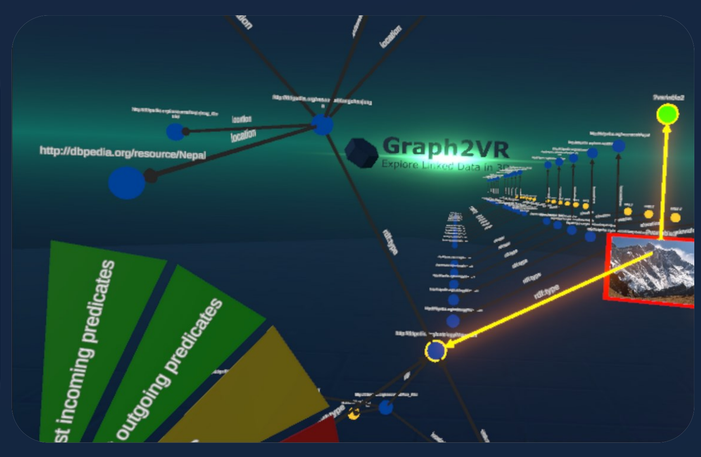
Visualisation and Exploration of Linked Data Using Virtual Reality - Poster

Kellmann, Alexander | Postema, Max | de Keijser, Joris | Svetachov, Pjotr | Wilson, Becca | van Enckevort, Esther | Swertz, Morris

VISUALISATION AND EXPLORATION OF LINKED DATA USING VIRTUAL REALITY

Linked Data is a best practice method to share and reuse data, in particular complex knowledge graphs. Visual processing of information and structures in large graphs comes naturally to people, and so development of tools for the visualisation of Linked Data has become a field of research interest in recent years. We have reviewed existing solutions and then created a prototype, Graph2VR, to work with graphs in Virtual Reality based on SPARQL queries, with the aim to help scientific applications such as cohort data harmonization.





Bio-/medical data in a VR application with predefined structure

Game/tec demo – Graph in a sphere can be zoomed and rotated freely in VR

Ontologies in 3D hierarchy layout

Visualisation of graphs in augmented reality using Microsoft HoloLens

Visualisation of Neo4j graphs in 3D and also in VR

Visual queries to generate SPARQL queries

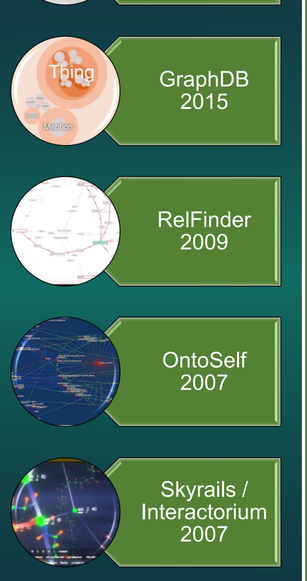
Visualisation of ontologies in VR (static)

Visualise Linked Data in GraphDB Expand and collapse the graph

Find and draw connections over multiple steps

Algorithms to draw graph networks

Fancy visualisation and navigation in 3D networks



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Authors: Alexander Kellmann, Max Postema, Joris de Keijser, Pjotr Svetachov, Becca Wilson, Esther van Enckevort, Morris A. Swertz

Contact: a.j.kellmann@umcg.nl

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