**Motivation**

**Growth of social networks**
- Austria: >30% of population on Facebook
- USA: >50% of population on Facebook

**Economic importance**
- Enormous amount of social data
- Social customer relationship

**Technological challenges**
- Continuous evolution of social data schemas
- Complex authorization and authentication systems

**Participation in a scientific project: TheHiddenU**
- A Social Nexus for Privacy-Assured Personalisation Brokerage
- www.social-nexus.net

**Goals**

**Survey on social networks**
- Features & characteristics
- Reverse engineering of data schema

**Social adaptors**
- Authorization
- Data extraction
- Data access

**Approach**

**Automatic reverse engineering of data schema**
1. Use REST web service for re-engineering
2. Identification of start points (e.g. user object)
3. Analysis of JSON response
4. Navigation to find relations and new objects
5. Transformation: JSON response → TheHiddenU ontology
6. Provide information for Java class generation

**Results**

**Survey on social networks**
- Description of selected social networks
- Class diagrams of data schemas

**Social adaptors**
- Implementation for easy data access

**Facebook: Evaluation of Json2Ontology tool**
- 1 start point (request URL)
- 1014 requests. response time: min.202ms, max.17.276ms, avg.501ms
- JSON data structure: 443 classes, 1811 attributes
- Comparison with documentation:
  - Detected: 79% classes, 80% attributes, 60% relations
  - Newly found: 7 classes, 162 attributes, 23 relations
- Result depends on user data