

**Akademia Górniczo-Hutnicza
im. Stanisława Staszica w Krakowie**

Wydział Elektrotechniki, Automatyki, Informatyki i Elektroniki



Podstawy Inżynierii Wiedzy

Labolatorium 6

Semantic Web Applications: Semantic Wikis

Sebastian Gacek, Łukasz Zieńkowski

Kraków 15 maja 2012

6. Semantic MediaWiki - Categories

Wiki page source 1:

```
[[Category:Student]]
```

My name is Sebastian Gacek. I am 23 years old.

Currently I study at AGH UST, faculty of electrical engineering.

I belong to group group1700. The other members of my group are:

Wiki page source 2:

```
[[Category:University subject]]
```

Sztuczne Sieci Neuronowe (SSN) - Artificial Neural Network (ANN)

7. Semantic MediaWiki - Properties

Updated wiki page source 1:

```
[[Category:Student]]
```

My name is [[Name::Sebastian Gacek]]. I am [[Age::23]] years old.

Currently I study at AGH UST, faculty of electrical engineering.

I belong to group [[Group::group1700]]. The other members of my group are

Updated wiki page source 2:

```
[[Category:University subject]]
```

Sztuczne Sieci Neuronowe (SSN) - Artificial Neural Network (ANN)

lead by: [[lead by::mgr Tomasz Orzechowski]]

room: [[room::A3/A4 421]]

duration: [[duration::90]] min

8. Semantic MediaWiki - Inline queries

Query 1:

```
{{#ask: [[Category:Student]] [[Group::group1700]]
|format=ul
}}
```

Query 2:

```
{{#ask: [[Category:Student]] [[Group::group1700]]
  | ?Name
  | ?Age
  | sort=Age,Name
  | format=table
  | default=There is nothing that U are looking for
}}
```

6. Loki - Use Cases

6.1. Movie recommendation system

Wiki page source:

~~NOCACHE~~

==== MATRIX ====

[[category:movie|]]

Title: [[title:=Matrix]]

Genre: [[genre::genre:Sci-Fi]]

Production Year: [[production_year:=1999]]

Production Country: [[production_country:=Australia]],

[[production_country:=USA]]

scenario: [[scenario::persons:andy_wachowski|Andy Wachowski]],

[[scenario::persons:lane_wachowski|Lane Wachowski]]

Direction: [[direction::persons:andy_wachowski|Andy Wachowski]],

[[direction::persons:lane_wachowski|Lane Wachowski]]

Cast:

[[main_role::persons:keanu_reeves|Keanu Reeves]] -

[[main_character::characters:neo|Neo]]

7. Loki - Semantic Web Standards

Query:

```
<pl format="sparql">
```

```
PREFIX wiki: <
```

```
SELECT ?movie ?title ?genre
```

```
WHERE {
```

```
    ?movie a "movie".
```

```
    ?movie wiki:title ?title .
```

```
    ?movie wiki:genre ?genre .
```

```
    FILTER (?title > "G")
```

```
}
```

```
ORDER BY (?title)
```

```
</pl>
```