

Semântica na Web

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Motivação

mesc

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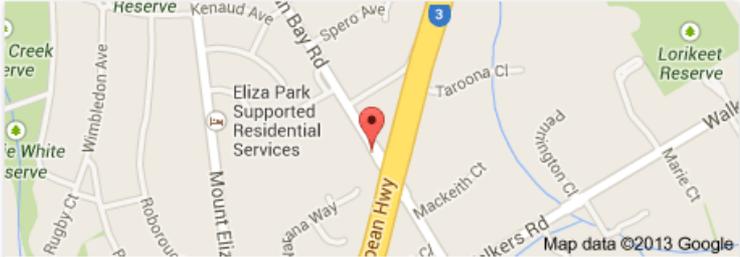
About 921,000 results (0.37 seconds)

Mount Eliza Secondary College
www.mesc.vic.edu.au/
A Victorian Government school. Includes news, events, curriculum information, college history, information for parents, International Students, virtual tour, staff, ...
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Canadian Bay Rd Mt Eliza VIC 3930, Australia
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UIA - About UIA and Unemployment Insurance in Michigan
<https://www.michigan.gov/uiia/0,4680,7-118-1328-137908--,00.html>
In 1937 we started out as the Michigan Unemployment Compensation Commission. Later, we became the **Michigan Employment Security Commission** or **MESC** ...

MESC 2013 | MESConference
www.mesconference.org/mesc-2013/
Mark yourcalendar for the 2013 **Medicaid Enterprise Systems Conference** ... and exhibiting will be posted to the **MESC** website as they become available.



Mount Eliza Secondary College

[Directions](#)

Mount Eliza Secondary College is a public co-educational secondary school located in Mount Eliza, Victoria, Australia. As of 2011 the school caters to approximately 1,000 students in years 7 to 12 from the local area. Wikipedia

Address: Canadian Bay Rd, Mt Eliza VIC 3930, Australia

[Feedback / More info](#)

Contexto ...

mesc mestrado

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About 24,100 results (0.16 seconds)

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[Erasmus Mundus Masters Courses - EACEA - Europa](#)
eacea.ec.europa.eu › EACEA › Erasmus Mundus › Selected projects
M.E.S.C. - Master in Materials for Energy Storage and Conversion, PDF English · http://www.u-picardie.fr/mundus_MESC. MA LLL - European Masters in ...

[\[PDF\] Edital - Mestrado - Revisado em reuniao de 11-09-2012 ...](#)
www.puro.uff.br/sites/default/files/EditalMestrado.pdf Translate this page
Sep 11, 2012 - candidatos ao Curso de Mestrado Profissional em Engenharia de ... (mesc@puro.uff.br), indicando nome completo e CPF do candidato.

[MESC - Mestrado em Educação e Sociedade do Conhecime...](#)
<https://woc.uc.pt/fpce/course/planocurricular.do?courseId=80>
Ano, Unidade Curricular, Duração, Área, Ramos, ECTS. 1, Análise do Discurso Pedagógico Contemporâneo, 1º Sem, C. Educação, 6.0 ...

Problemas na Web Atual

- Pouca integração de informações
 - Site de loja realiza de venda de carros
 - Site de fabricante descreve dados dos carros
- Interação essencialmente homem-máquina
 - Obtenção “manual” de dados da web
- Redundância de dados
 - Representação de dados distinta
 - Possível inconsistência de dados
- Não classificação dos dados disponíveis

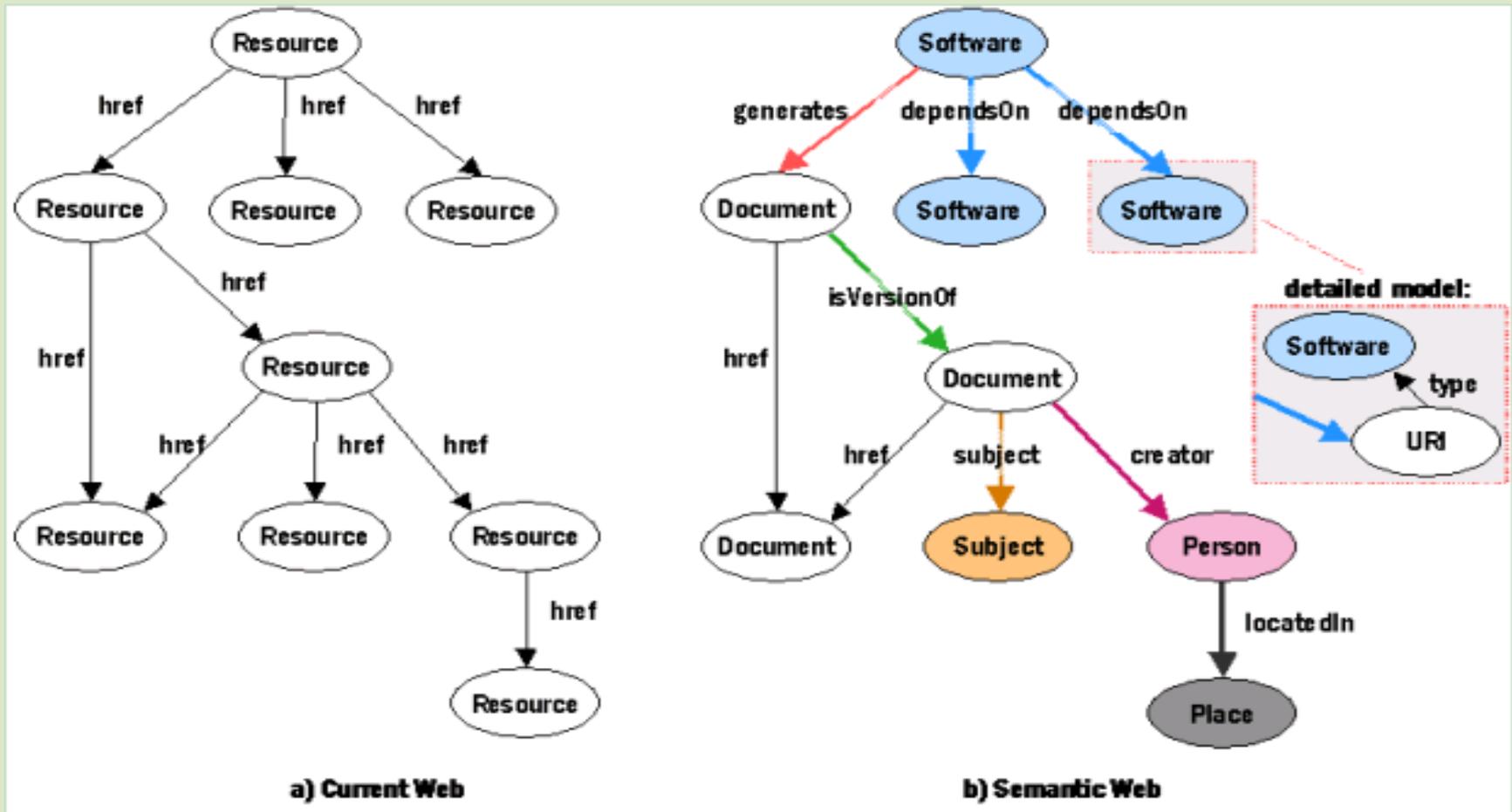
Algumas Iniciativas

- Disseminação de serviços (APIs)
- Classificação e padronização dos dados
 - Definição de ontologias
 - Onto (o que existe) + Logos (conhecimento sobre)
- Uso de linguagens para representação dos dados
 - XML/JSON, RDF, OWL, RDFa, Microdata, JSON-LD
 - ...
- Disponibilização de repositórios (datasets) e vocabulários: DBPedia [4], GeoNames [3], DBLP, FOAF, ...

Algumas Iniciativas

- Schema.org
- WolframAlpha
 - Siri
- Google Knowledge Graph
- Open Graph Protocol (Facebook)
- Satori Knowledge Base (Bing, Microsoft)
- Yahoo!, Baidu, ...

Hoje e Amanhã [1]



O que é a Web Semântica

"The Semantic Web is an extension of the current web in which information is given well-defined meaning, better enabling computers and people to work in cooperation." [5]

Problemas com XML, JSON, ...

```
< cursos >  
  < nome >MESC</ nome >  
  < universidade >UFF</ universidade >  
</ cursos >
```

```
< universidade >  
  < nome >UFF</ nome >  
  < cursos >  
    < mestrado >MESC</ mestrado >  
  </ cursos >  
</ universidade >
```

Página Exemplo

```
1 <html>
2   <head>
3     <title>Barack Info</title>
4   </head>
5   <body>
6     <p>Barack Obama, the 44th President of the United States is the husband of
7     Michelle Obama.</p>
8 </html>
```

Exemplo em RDFa/Schema.org

```
1 <html>
2   <head>
3     <title>Barack Info</title>
4   </head>
5   <body>
6     <div vocab="http://schema.org/" typeof="Person">
7       <span property="name">Barack Obama</span>, the
8       <span property="disambiguatingDescription">44th President of the United
9       States</span> is the husband of
10      <div property="spouse" typeof="Person">
11        <span property="name">Michelle Obama</span>.
12      </div>
13    </div>
14  </body>
</html>
```

Exemplo em JSON-LD/Schema.org

```
1 <html>
2   <head>
3     <title>Barack Info</title>
4     <script type="application/ld+json">
5       {
6         "@context": "http://schema.org",
7         "@type": "Person",
8         "name": "Barack Obama",
9         "disambiguatingDescription": "44th President of the United States",
10        "spouse": {
11          "@type": "Person",
12          "name": "Michelle Obama"
13        }
14      }
15    </script>
16  </head>
17  <body>
18    <p>Barack Obama, the 44th President of the United States is the husband of
19    Michelle Obama.</p>
20  </body>
21 </html>
```

JSON-LD

- Recomendação do Google para estruturação de páginas
- Importante para o buscador melhor identificar o conteúdo
- Melhora índice nas buscas (SEO)

Exemplo JSON-LD

```
<html>
  <head>
    <title>Party Coffee Cake</title>
    <script type="application/ld+json">
      {
        "@context": "https://schema.org/",
        "@type": "Recipe",
        "name": "Party Coffee Cake",
        "author": {
          "@type": "Person",
          "name": "Mary Stone"
        },
        "datePublished": "2018-03-10",
        "description": "This coffee cake is awesome and perfect for parties.",
        "prepTime": "PT20M"
      }
    </script>
  </head>
  <body>
    <h2>Party coffee cake recipe</h2>
    <p>
      This coffee cake is awesome and perfect for parties.
    </p>
  </body>
</html>
```

Exemplo JSON-LD

Recipes [VIEW ALL](#)



Apple Pie by Grandma
Example.com
4.8 ★★★★★ 7,462 reviews
1 hr 30 min · 512 calories



Grandma's Apple P
Example.com
4.8 ★★★★★ 2,055 re
1 hr 30 min · 512 calories

Referências

- [1] “*Semantic Web: Overviews and Trends*”, Prof. Joongmin Choi, Intelligent Systems Laboratory, Hanyang University
- [2] “*The Semantic Web*”, Tim Berners Lee et al, Scientific American, Maio 2001.
- [3] “Schema.org: Evolution of Structured Data on the Web”:
<http://queue.acm.org/detail.cfm?ref=rss&id=2857276>
- [4] Wikipedia: https://en.wikipedia.org/wiki/Semantic_Web
- [5] Recomendação do Google:
<https://developers.google.com/search/docs/guides/intro-structured-data#search-appearance>
- [6] Review of the Semantic Web Field, ACM 2021,
<https://cacm.acm.org/magazines/2021/2/250085-a-review-of-the-semantic-web-field/fulltext?mobile=false#FNS>