

# andrés santos

web, language and semantics

## about

### address

R. Mouzinho de  
Albuquerque 413,  
hab 3.2  
4450-206 Matosinhos  
Portugal

### phone

+351 927 715 379

### birth date

24 Feb 1988

### contacts

github.com/andrefs   
cv@andrefs.com 

## languages

native portuguese  
fluent english  
basic spanish+french

## favorite tools

♥ TypeScript, React,  
Docker, Rust

## looking into

 Rust, Kubernetes

## interests

Fullstack developer with backend preference, working with Node.js, React, TypeScript, Docker. Interested in semantic web, natural language processing, functional programming, machine learning and web development.

## technical skills

### Languages

**Node.js, TypeScript and Perl**

Also Rust,  $\text{\LaTeX}$

### Databases

**MongoDB**

Also MySQL, PostgreSQL, ElasticSearch

### Frameworks

**Express, Dancer**

### and libraries

Also React, Jest

### Other tools

**Docker, Git, Bash**

## relevant experience

- |                |  |                             |
|----------------|--|-----------------------------|
| since Jan 2022 | <b>Decipad, remote</b> – decipad.com   | Software engineer           |
|                | Interactive notebook to explore data. Typical tasks include:   |                             |
|                | <ul style="list-style-type: none"><li>improving and extending the grammar for an in-house developed language</li><li>implementing logic supporting complex editor components (e.g. code lines)</li><li>implementing React components on top of a Slate.js/Plate editor</li></ul> |                             |
| since Apr 2017 | <b>INESC TEC, Porto</b>  | Research assistant          |
| 2018 Oct to    | <b>University of Minho, Braga</b>  | Guest assistant professor   |
| 2020 Sep       | Teaching MSc classes:  |                             |
|                | <ul style="list-style-type: none"><li>Natural Language Processing</li><li>Data Analysis and Visualization</li></ul>  |                             |
|                | <a href="http://di.uminho.pt">http://di.uminho.pt</a> , <a href="http://elach.uminho.pt">elach.uminho.pt</a>   |                             |
| 2016 Jul to    | <b>Contentful GmbH, Berlin</b> – contentful.com  | JavaScript backend engineer |
| 2017 Mar       | Headless API-first CMS. Typical tasks included:  |                             |
|                | <ul style="list-style-type: none"><li>development and support of multiple Node.js APIs,</li><li>management of several MongoDB databases,</li><li>development of Node.js and Perl frontend websites and backoffices</li></ul>   |                             |
| 2013–2015      | <b>SAPO, Portugal Telecom, Lisbon</b>  | Consultant, web developer   |
|                | Largest Portuguese web portal. Typical tasks included:   |                             |
|                | <ul style="list-style-type: none"><li>development and support of Node.js APIs,</li><li>management of several MongoDB databases,</li><li>development of Node.js and Perl frontend websites and backoffices</li></ul>  |                             |
|                | <a href="http://sapo.pt">http://sapo.pt</a> , <a href="http://24.sapo.pt">http://24.sapo.pt</a> , <a href="http://jornais.sapo.pt">http://jornais.sapo.pt</a>  |                             |
| 2011–2013      | <b>Subvisual, Braga</b> – subvisual.co   | Sys admin                   |
|                | UX, UI, web and mobile development company   |                             |
|                | Typical tasks included:  |                             |
|                | <ul style="list-style-type: none"><li>deployment and management of Unix-based servers, with Apache and MySQL services, and Ruby on Rails applications</li><li>development of helper scripts to automate server management tasks</li></ul>  |                             |

## education

since Oct 2017	<b>MAP-i Doc. Prog. in Computer Science</b>	Fac. of Sciences of Univ. of Porto, Portugal
	Semantic measures in large semantic graphs (ongoing)	
	180 ECTS	
2011–2012	<b>MSc in Bioinformatics</b>	University of Minho, Portugal
	Mining biological parameters from literature: an application to environmental decision support systems (thesis)	
	Development of a framework for building text mining applications for scientific literature, focused on numerical parameters and supported by 3rd-party tools and expert-curated ontologies.	
	120 ECTS, final grade 17/20	
2009–2011	<b>MSc in Natural Language Processing</b>	University of Minho, Portugal
	Contributions for building a Corpora-Flow System (thesis)	
	Development of a system to support automatic handling of corpora (cleaning, validation, format conversion), document alignment and calculation of alignability metrics of several types of documents.	
	120 ECTS, final grade 17/20	
2006–2009	<b>BSc in Software Engineering</b>	University of Minho, Portugal
	Typical CompSci course	
	180 ECTS, final grade 15/20	

## other activities

**cesium** University of Minho's Software Engineering Student Center

2009/10	<b>Vice-president</b>	<a href="http://cesium.di.uminho.pt">http://cesium.di.uminho.pt</a>
2010/11	<b>Director at CAOS</b>	<a href="http://caos.di.uminho.pt">http://caos.di.uminho.pt</a>
	CeSIUM's Open Source Support Center	

## programming competitions

2018	<b>Pixels Camp</b>	<a href="https://github.com/luispmiranda/boothchain">https://github.com/luispmiranda/boothchain</a>
	3rd qualified team with a blockchain-powered photo booth.	
2015	<b>Miniclip Game Jam</b>	<a href="https://github.com/subvisual/planet-mocha">https://github.com/subvisual/planet-mocha</a>
	3rd qualified and Innovation prize with a space inspired game.	
2014	<b>SAPO Codebits Hackathon</b>	<a href="https://github.com/andrefs/policias_beduinos">https://github.com/andrefs/policias_beduinos</a>
	2nd qualified team with a web application to extract relevant topics from a large collection of news.	
2012	<b>APPP Perl Code Sprint</b>	<a href="http://perl.pt">http://perl.pt</a>
	3rd qualified in the Perl programming competition organized by the Portuguese Perl Mongers group.	
2009	<b>Microsoft Imagine Cup'09</b>	Lisbon, Portugal
	5 <sup>th</sup> classified in the national finals.	
2008	<b>ACM South Western European Regional Contests</b>	Nuremberg, Germany
	International programming competition.	
2007-2009	<b>Inter-University Programming Marathon</b>	IST'07, UC'08, ESTGA'09
	National ACM-style programming competition.	

## sports

since 1999	<b>Judo, 1st Kyu</b>	INATEL, University of Minho, Boavista Futebol Clube, Sport Club do Porto
2018	<b>Veterans Open Championship</b> Gold medal	Associação Distrital de Judo de Lisboa
2018	<b>Veterans National Championship</b> Silver medal	Portuguese Judo Federation
2010-2013	<b>National Judo University Championships</b>	Aveiro'10, Lisbon'11, Aveiro '12, Coimbra '13

## publications

### chapter

José João Almeida, Sílvia Araújo, Nuno Carvalho, Idalete Dias, Ana Oliveira, André Santos, and Alberto Simões. "The Per-Fide corpus: A new resource for corpus-based terminology, contrastive linguistics and translation studies". In: Working with Portuguese Corpora. Ed. by Tony Berber Sardinha and Telma de Lurdes São Bento Ferreira. Bloomsbury Publishing, 2014. Chap. 9, pp. 177–200.

### articles in peer-reviewed journal

Applying a text mining framework to the extraction of numerical parameters from scientific literature in the biotechnology domain

A. Santos, R. Nogueira, and A. Lourenço

Advances in Distributed Computing and Artificial Intelligence Journal (ADCAIJ) 1 (June 2012) pp. 1–8. 2012

### peer-reviewed conferences/proceedings

Derzis: A Path Aware Linked Data Crawler

André Fernandes dos Santos and José Paulo Leal

10th Symposium on Languages, Applications and Technologies (SLATE 2021), 2021

DAOLOT: A Semantic Browser

João Bruno Silva, André Santos, and José Paulo Leal

9th Symposium on Languages, Applications and Technologies (SLATE 2020), 2020

Structural alignment of plain text books

André Santos, José João Almeida, and Nuno Carvalho

Proceedings of the Eight International Conference on Language Resources and Evaluation (LREC'12), 2012, Istanbul, Turkey

A survey on parallel corpora alignment

A. Santos

MI-Star 2011, Braga, Portugal, 2011

Text::Perfide::Bookcleaner, a Perl module to clean and normalize plain text books

A. Santos and J.J. Almeida

Congreso Anual de la Sociedad Española para el Procesamiento del Lenguaje Natural (SEPLN2011), Huelva, Spain, 2011

Bigorna – A Toolkit for Orthography Migration Challenges

J.J. Almeida, A. Santos, and A. Simoes

Proceedings of the Seventh International Conference on Language Resources and Evaluation (LREC'10), 2010, Valletta, Malta

AGile, a structured editor, analyzer, metric evaluator, and transformer for Attribute Grammars

A. Rocha, A. Santos, D. Rocha, H. Silva, J. Mendes, J. Freitas, M. Coelho, M. Regedor, D. da Cruz, and P.R. Henriques

INForum 2010, Braga, Portugal, 2010

## **dissertations**

Mining biological parameters from literature: an application to environmental decision support systems

André Santos

Master's dissertation, Departamento de Engenharia Biológica, Escola de Engenharia, Universidade do Minho, 2012

Contributions for building a Corpora-Flow system

A. Santos

Master's dissertation, Departamento de Informática, Escola de Engenharia, Universidade do Minho, 2011

## **presentations and workshops**

Aprender por projetos com Raspberry Pi

Luís Santos and André Santos

jCDE2016 - IV Jornada Conteúdos Digitais para a Educação, 2016

Elasto Mania

A. Santos

In SAPO Codebits VII, 2014

Building your own CPAN with Pinto

A. Santos

In Portuguese Perl Workshop'13, 2013

“Perl is dead” is dead

A. Santos

In Sapo Codebits VI, 2012

Dist::Zilla

A. Santos

In Portuguese Perl Workshop'12, 2012

Cleaning plain text books with Text::Perfide::BookCleaner

A. Santos

In Portuguese Perl Workshop'11, 2011

Preparação de livros para alinhamento

A. Santos

In I Jornadas Internacionais Per-Fide: Corpora e Tradução, 2011

Detecção e Correção Parcial de problemas na Conversão de Formatos

A. Santos

In I Workshop Per-Fide: Construção, exploração e aplicação de Corpora Paralelos. 2010

Mini aplicações web com Mojolicious::Lite

A. Santos

In Portuguese Perl Workshop'10, 2010