Daniel **Kneipp**

Artificial Intelligence Developer

Contact

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in://daniel-kneipp
github://DanielKneipp
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Languages

Brazilian Portuguese
[Mother tongue]
English
[Professional working proficiency]

Programming

C++, Python, R, JavaScript, Matlab, Java, Bash

Skills

Machine Learning:

Optimization:

Computer Vision:

Text Mining:

About me

I am objective and focused on results. With entrepreneurship in my veins, I spent many years studying and learning, from Convolutional Neural Networks to SWOT Analysis and Nash Equilibrium, trying to make a difference. I know that it looks like a Miss Universe candidate speech asking for world peace (joke), but I really work hard to do something that can change the game. Please, checkout my code repository (https://github.com/DanielKneipp) to see some cool stuff.

Education

2016–2018 **Master** of Science — *Federal University of Minas Gerais (UFMG)*
My research area is DNA Computing. The objective is to propose functional chemical circuits for classification tasks using Chemical Reaction Networks theory as a programming language and DNA strands as the hardware. I'm a NanoComp lab. Member (http://www.nanocomp.dcc.ufmg.br/).

2012–2015 **Bachelor** of Science — *Federal University of Viçosa (UFV)*
I received Presidente Bernardes Medal for my academic excellence (85.4/100). Final Paper: A Genetic Algorithm for Multi-Component Optimization Problems: The Case of the Travelling Thief Problem.

2010–2011 **Technician's** Degree — *SENAI School*
I Studied the basics of Computer Architecture, Software Development and Network Infrastructure.

Independent Courses

- Deep Learning – *Google* | *Udacity*
- Machine Learning – *Stanford University* | *Coursera*

Experience

Full Time

2017–Now **Research and Development Analyst** — *MOST Specialist Technologies*
Main activities:
- Clustering and analysis of textual medical records;
- Document classification based on its textual content;
- Modular deployment of solutions using Docker.

Part Time

2016–2017 **Research Program** *Invent Vision*
Deep Learning research for Computer Vision applications. Implementation of a set of tools to speedup the development (including synthetic dataset generation) and deployment of image classifiers. Application deployment in embedded systems (Nvidia Jetson). Project name: Smart monitoring system by georeferenced images for railways applications.

2015–2016 **Trainee** *Invent Vision*
Research and implantation of distributed computing systems (based on Hadoop and Spark), developing simple applications made to run across clusters.

2013–2014 **Undergraduate Research** *Invent Vision*
Development of an efficient drowsiness detector based on face expressions (using face and eye tracking algorithms). Deployment made on x86 computers and ARM embedded systems. Project name: System for photometric inspection and automated adjustment of vehicle headlights. Project funded by CNPq (National Council for Scientific and Technological Development).

awards

2011 **Postgraduate Scholarship** *School of Business, The University of California*
Awarded to the top student in their final year of a Bachelors degree. Mastered the art of filing accurate TPS reports.

communication skills

2011 **Oral Presentation** *California Business Conference*
Presented the research I conducted for my Masters of Commerce degree.

2010 **Poster** *Annual Business Conference, Oregon*
As part of the course work for BUS320, I created a poster analyzing several local businesses and presented this at a conference.

interests

professional: data analysis, company profiling, risk analysis, economics, web design, web app creation, software design, marketing **personal:** piano, chess, cooking, dancing, running

publications

article in peer-reviewed journal

Electronic Sensors for Assessing Interactions between Healthcare Workers and Patients under Airborne Precautions
Jean-Christophe Lucet, Cédric Laouenan, Guillaume Chelius, Nicolas Veziris, Didier Lepelletier, Adrien Friggeri, Dominique Abiteboul, Elisabeth Bouvet, France Mentré, Eric Fleury
PLoS ONE 7.5 (May 2012) e37893. 2012

Reconstructing Social Interactions Using an unreliable Wireless Sensor Network
Adrien Friggeri, Guillaume Chelius, Eric Fleury, Antoine Fraboulet, France Mentré, Jean-Christophe Lucet
Computer Communications 34.5 (Apr. 2011) pp. 609–618. Elsevier, 2011

A Real-World Spreading Experiment in the Blogosphere
Adrien Friggeri, Jean-Philippe Cointet, Matthieu Latapy
Complex Systems 19.3 (2011). Complex Systems Publications, Inc., 2011

books

Microformats: Empowering Your Markup for Web 2.0
John Allsop
Publisher, 2007, London

international peer-reviewed conferences/proceedings

Egomunities, Exploring Socially Cohesive Person-based Communities
Adrien Friggeri, Guillaume Chelius, Eric Fleury
NetSci 2011 The International School and Conference on Network Science, 2011, Budapest, Hongrie

Fellows: Crowd-sourcing the evaluation of an overlapping community model based on the cohesion measure
Adrien Friggeri, Guillaume Chelius, Eric Fleury
Interdisciplinary Workshop on Information and Decision in Social Networks, 2011, Cambridge, États-Unis

Fellows: Crowd-sourcing the evaluation of an overlapping community model based on the cohesion measure
Adrien Friggeri, Guillaume Chelius, Eric Fleury
Complex Dynamics of Human Interactions, 2011, Vienna, Autriche

Triangles to Capture Social Cohesion
Adrien Friggeri, Guillaume Chelius, Eric Fleury
Third IEEE International Conference on Social Computing, 2011, Cambridge, États-Unis

Electronic Sensors for Measuring Interactions between Healthcare Workers (HCWs) and Patients (Pts): the Case of Tuberculosis (TB)
Jean-Christophe Lucet, Guillaume Chelius, Cédric Laouenan, Adrien Friggeri, N. Veziris, D. Lepelletier, D. Abiteboul, Elisabeth Bouvet, Eric Fleury, France Mentré
2010 Interscience Conference on Antimicrobial Agents and Chemotherapy, 2010, Boston, États-Unis

local peer-reviewed conferences/proceedings

Communautés : Arrêtons de ne compter que les arêtes
Adrien Friggeri, Guillaume Chelius, Eric Fleury
13es Rencontres Francophones sur les Aspects Algorithmiques de Télécommunications (AlgoTel), 2011, Cap Estérel, France

Trouver des communautés socialement cohésives est NP-dur
Adrien Friggeri, Guillaume Chelius, Eric Fleury
13emes journées Graphes et Algorithmes, 2011, Lyon, France

Biais dans les mesures obtenues par un réseau de capteurs sans fil
Adrien Friggeri, Guillaume Chelius
12èmes Rencontres Francophones sur les Aspects Algorithmiques de Télécommunications (AlgoTel), 2010, Belle Dune, France

other publications

Des triangles pour mesurer la cohésion sociale : Fellows, une expérimentation sur Facebook
Adrien Friggeri, Eric Fleury
Séminaire w2s @ La Cantine, 2011

research reports

Finding cohesive communities with C^3
Adrien Friggeri, Eric Fleury
Rapport de recherche RR-7947, 2012

Egomunities, Exploring Socially Cohesive Person-based Communities
Adrien Friggeri, Guillaume Chelius, Eric Fleury
Rapport de recherche RR-7535, 2011

Triangles to Capture Social Cohesion

Adrien Friggeri, Guillaume Chelius, Eric Fleury
Rapport de recherche RR-7686, 2011

Maximizing the Cohesion is NP-hard
Adrien Friggeri, Eric Fleury
Rapport de recherche RR-7734, 2011