Daniel **Kneipp**

Artificial Intelligence Developer

Contact

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in://daniel-kneipp
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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:
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About me

I am objective and focused on results. With entrepreneurship in my veins, I've spent many years studying and learning, from Convolutional Neural Networks to SWOT Analysis and Nash Equilibrium, trying to make a difference where I go. I know that it looks like a Miss Universe candidate speech asking for world peace (joke), but I really work hard to make some impact. 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)*
Comptuer Science
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)*
Computer Science
I received Presidente Bernardes Medal for my academic excellence. Final Paper: A Genetic Algorithm for Multi-Component Optimization Problems: The Case of the Travelling Thief Problem.

2010–2011 **Technician's** Degree   *SENAI School*
Informatics
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

2015	**University Medal**	*Federal University of Viçosa*

The *Presidente Bernardes* Medal is awarded to the students with academic excellence.

Communication skills

2017	**Oral Presentation**	*Evostar Conference*

Presented the research I conducted to obtain my Bachelor's degree. It was about the usage of Genetic Algorithms to optimize and solve a multi-component combinatorial problem.

Publications

Article in journals

A Comparison of Algorithms for Solving Multicomponent Optimization Problems
  Daniel Kneipp Sa Vieira, Marcus Henrique Soares Mendes
  IEEE Latin America Transactions 15.8 (2017) pp. 1474–1479. IEEE, 2017

International Conferences/Proceedings

A Genetic Algorithm for Multi-component Optimization Problems: The Case of the Travelling Thief Problem
  Daniel KS Vieira, Gustavo L Soares, Joao A Vasconcelos, Marcus HS Mendes
  European Conference on Evolutionary Computation in Combinatorial Optimization, 2017