Jodelson Sabino

Data Scentist Advisor and Researcher

Resume

− Education

DSc in Industrial Engineering
PUC-Rio & Université Libre de Bruxelles

March, 2009

Title obtained from PUC-Rio University located at Rio de Janeiro (RJ), Brazil

- Thesis Title (translated to English): ANT COLONY OPTIMIZATION APPLIED TO SWITCH ENGINE OPERATIONS PLANING
- Supervision: Prof. José Eugênio Leal from PUC-Rio University
- Co-supervision: Dr. Thomas Stützle from IRIDIA (Institut de Recherches Interdisciplinaires et de Développements en Intelligence Artificielle), Université Libre de Bruxelles, Brussels, Belgium

During my Phd I worked as an invited researcher for one year at IRIDIA Artificial Intelligence lab, Université Libre de Bruxelles, Brussels, Belgium, developing a custom coded ACO based algorithm to tackle the railroad yard locomotives operation planing problem.

The prescriptive advanced analytics model validation and cost reduction estimation was done based on a real life case study.

My PhD Thesis document
2.31 MB   74 downloads

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Language: PT-BR …

MSc in Informatics
Universidade Federal do Espírito Santo

May, 2006

Title obtained from Universidade Federal do Espírito Santo, located at Vitória (ES), Brazil, with dissertation titled "ANT COLONY COMPETITION APPLIED TO SWITCH ENGINE ASSIGNMENT IN RAILROAD YARDS (translated)" under the supervision of Dra. Lucia Catabriga.

The dissertation proposes a meta-heuristic method based on a multiple ant colony optimization system to solve the problem of switch engines assignment in a railroad yard. According to the proposed modeling, the problem presented here is similar to the one known in the literature as a Full Truckload Pickup and Delivery Problem with Time Windows and Capacity Constraints (PDPTWC) and the objective is to fulfill a set of transportation requests with minimal cost, which is described as a multi-objective function. The specific characteristics of this problem are presented and a solution method based in the COMPETants algorithm is developed for the switch engine designation.

Postgraduate Certificated in Project Management
IETEC

Dec, 2001

Title obtained from IETEC – Instituto de Educação Tecnológica, Belo Horizonte, MG, Brazil.

The course was based on the PMI Methodology and the final postgraduate work was a real life project to upgrade the OS release in an on premise UNIX server farm.

Bachelor of Mathematics
Universidade Federal do Espírito Santo

Dec, 1986

- Title obtained from Universidade Federal do Espírito Santo, located in Vitória (ES), Brazil

During undergraduation period I have taken some MSc degree level summer courses in Applied Mathematics in the following institutions in Brazil

- IMPA (Institute for Pure and Applied Mathematics) is a research institution and a graduate school connected to the Brazilian Ministry of Science, Technology, Innovations ans Communications and Ministry of Education.
- UFRJ – (Federal University of Rio de Janeiro) the 3rd best university in Brazil and the 7th best in Latin America (QS Rankings – 2018).

Employment

Artificial Intelligence Specialist
Vale

July, 1987 - present

From junior to specialist and leader positions, in infrastructure, business partner and Information Systems areas, in the functions of architecture design, solution development and deployment, IT services and Innovation, I have performed a broad range of activities in the Information Technology Department worldwide at Vale for over 30 years.

Currently, my responsibilities include mostly training, research and development within the Artificial Intelligence Center (AI Center) at Vale.

These are my main duties at the moment

- Worldwide Data Science Training Program Designer and instructor
- University and Research Centers partnerships arrangements
- Corporate Data Science advisor
- Researcher in Artificial Intelligence

Main role: Advisory to AI project managers, business unit engineers and consulting personal to solve descriptive, predictive and prescriptive data analytics problems that emerges from real world industrial operations and planning scenarios.

Specialties: In deep IT infrastructure technical skills, including vast knowledge and extensive experience in project management. Effective communication and interpersonal relationship skills. Ability to build and mobilize teams in order to reach objectives. Easiness to identify, analyze, formulate and solve industrial problems by applying specialized scientific methods. Natural motivation and initiative for applied scientific researches Main products delivered most recently:

- Oman Pelletizing Plant predictive and prescriptive model build and transition to run advisory
- Worldwide Advanced Analytics Training Program design (version 2.0 – Corporate and community members audiences)
- Boot Camp in predictive analysis training – 500+ Business Units Engineers and IT specialists trained around the world

Professor at the Post-graduation Department
FAESA

june, 2019 - present

I work as a data science reference professor faculty member with the following roles

- Post-graduation course content design contributor
- E-Learning and Instructor-Led Training delivery
- Faculty mentoring to provide students guidance to term paper production

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− Recognition

Student paper Award
INFORMS - The Institute for Operations Research and the Management Sciences

November, 2002

I was awarded in the first ever annual Student Research Paper Contest on analytics and fact-based decision making in railway application sponsored by Railway Application Session, a subdivision of INFORMS (Institute for Operations Research and Management Sciences) for the paper
"Ant Colony Optimization Applied to Railroad Yard Planning"

ANPET 2015 scientific production award
ANPET - Associação Nacional de Pesquisa e Ensino em Transportes

November, 2015

I won this prize, together with three other fellows from GEMMAH, because our paper was selected as one of the best ones on "models and transportation planning techniques" submitted to the XXIX ANPET Congress.

Original paper title, in portuguese: "Planejamento do transporte de empregados por uma frota de ônibus fretada por meio de um modelo matemático baseado no Open Vehicle Routing Problem (OVRP)

ANPET 2015 awarded paper
🖨 565.64 KB   ⬇ 55 downloads

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2015 RecogniTion program   July, 2015
Vale S.A.

Recognized in the 3rd IT Recognition Program event by receiving two certificates of appreciation for the outstanding job done in the follow initiatives:

- Vale production management operations and planing architecture and infrastructure design support
- Railroad operations planing prescriptive solution project management support

and also chosen by department colleagues as one of the employees that make a difference for the following value:

- Improve together

– Certified Skills

Language

Globally accepted qualifications

The certified language skill levels reported below uses for evaluation the popular **CEFR standard (Common European Framework of Reference for Languages)**. The six reference English levels are widely accepted as the global standard for grading an individual's language proficiency.

The ALTE (Association of Language Testers in Europe) "Can Do" project developed a simplified set of 400+ descriptors in the form of "can-do statements", each saying more simply what a learner can do at every level. For more details check the ALTE Can Do Statement and look for the levels reported below.

English

Advanced (C1)

Issued by University of Cambridge

French

Basic (A2)

Issued by Ministère de l'Enseignement supérieur, de la Recherche et de l'Innovation de la République Française

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World Organization of Scout Movement (WOSM)

Worldwide recognized qualifications

Awarded the Wood Badge to recognize significant achievement in leadership training for Scout Associations.

Certification issued by Escoteiros do Brasil, which is the Brazilian certified and recognized WOSM association.

Track 2 - Administration and management Skills

Advanced (wood badge)

Issued by Escoteiros do Brasil

Official Academic Curriculum links

Click in the links below to access my official academic CV as recorded in the National Council of Scientific and Technological Development database

🌐 Currículo Lattes - English version
Language: International English

English ➝

👤 Currículo Lattes - Portuguese version
Language: Brazilian Portuguese

Portuguese ➝

🗄 **Portfolio** ⌄

❝ **Testimonials** ⌄

✉ **Contacts** ⌄