



Allyne Machado dos Santos

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Born on 12/03/1990

EDUCATION HISTORY

2019 – 2023:

Ph.D. in Chemical Engineering
Norwegian University of Science and Technology (NTNU)
Trondheim - Norway

In collaboration with Nofitech.

- Thesis: *"Modelling, Optimization and Control of Recirculating Aquaculture Systems"*.
Advisors: Prof. Sigurd Skogestad, Assoc. Prof. Johannes Jäschke

2017 – 2019:

M.Sc. in Chemical Engineering
Federal University of Rio de Janeiro (UFRJ)
Rio de Janeiro, RJ - Brazil

Financial support from Brazilian research institutions: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) and Fundação de Amparo à Pesquisa do Estado do Rio de Janeiro (FAPERJ).

- Master thesis: *"Gray-box Nonlinear System Identification using Polynomial NARMAX Models"*. Advisors: Prof. Argimiro R. Secchi and Prof. Maurício B. de Souza Jr.

2010 – 2016:

B.Sc. in Chemical Engineering
Federal University of Rio de Janeiro (UFRJ)
Rio de Janeiro, RJ - Brazil

- Final project: *"Heat integration of a Natural Gas Processing Unit"*. Advisors: Prof. Argimiro R. Secchi, Kese Pontes Freitas Alberton and Carlos Paiva

WORK EXPERIENCE

Mar/2023 – Current

RD&I Senior Researcher
Deep Seed Solutions, Researcher 7
Rio de Janeiro, RJ - Brasil

Mapping and developing methodologies for new features to the main software in the company, FLOCO®.

Software qualification in C++.

In collaboration with several companies in the oil and gas industry, including Aker BP, Karoon Energy. Direct contact with the client.

2019 – 2023:

Ph.D. in Chemical Engineering
Norwegian University of Science and Technology (NTNU)
Trondheim - Norway

Temporary position in collaboration with Nofitech.

Main tasks:

- Analysis of industrial data;
- Machine learning application;
- Process optimization and control;
- Modelling and simulation;
- Student supervision.

Set/2018 – Dez/2018

Exchange Program

Norwegian University of Science and Technology (NTNU), External Researcher
Trondheim - Norway

Internship with financial support from the International Partnerships for Excellence Education, Research and Innovation Consortium (INTPART) in collaboration with Subsea Production and Processing (SUBPRO).

- Project: *"System Identification and nonlinear model predictive control applied on gas lift with two wells system"*. Advisors: Prof. S. Skogestad and D. Krishnamoorthy.

Jul/2013 – Jun/2014

Internship

Laboratory of Software Development, Intern
Rio de Janeiro, RJ - Brazil

Intern with a research scholarship from Fundação COPPETEC.

Main tasks:

- Identify the most important process variables for production optimization;
- Development of a routine to perform statistical monitoring calculations in Matlab;
- Analyze the process using univariate statistical process control (SPC).

Jul/2013 – Jun/2014

Exchange Program

Universidade de Queensland, Exchange Student
Brisbane, QD - Australia

Science without Borders Program.

SKILLS AND OBSERVATIONS

Language Skills

- Portuguese – Native
- English – Fluent
- Norwegian – Beginner

Computer Skills

- Microsoft Office, Latex, and Git
 - Programming: Matlab, Python, C++, R, MySQL
- Courses: (Certificates)
- Python & MySQL - certified by Udemy
 - Unix Shell; R (Rstudio); Git - certified by Software Carpentry

Communication

Good communication skills developed during tutoring. English fluency developed during English course, exchange programs, and private tutoring in Australia. Norwegian basic skills developed during a Norwegian course and daily practice. Teamwork skills developed during graduation, exchange programs, student supervision, and collaboration with other projects during my Ph.D. research.

ADDITIONAL INFORMATION

Interests

I enjoy searching for alternative ways of problem-solving to make decisions or to present a case to those who need to make the decision. I am always interested in meeting new people and making friends. I love traveling, taking pictures, and knowing the culture and mundane life of people from different countries. Besides that, I love watching movies and TV series and listening to music.