

DR. JOSE LUIS SILVA

Founder at Oxaala, PostDoc in Artificial Intelligence

@ jose.silva@liu.se Artificial Intelligence and Integrated Computer Systems (AIICS)
📍 Linköping University, Sweden 🌐 <https://jseluis.com> 📄 [jose Luis](#) 🐙 github.com/jseluis



EDUCATION

Uppsala University (UU)

Ph.D. & Licenciante Degree in Physics

📅 Mar 2016 – Sept 2020 📍 Uppsala, Sweden

- **Brief Description:** I have led the computational physics simulations of six projects using high-performance computing to design materials for green energy. [📄 Download Thesis](#)
- **Programming Languages:** C/C++, Python, Matlab, and Shell-script.
- **Metrics:** 6 high-impact publications in international Journals, and presentations at conferences in Brazil, USA (Stanford University), and Europe.

PROFESSIONAL EXPERIENCE

Linköping University

PostDoctoral Researcher in AI

📅 Mar 2020 – Present 📍 Linköping, Sweden

- Research in AI within Autonomous Systems and Materials Science.

Stockholm AI

Technical Manager

📅 Dec 2020 – Present 📍 Stockholm, Sweden

- Management of Technical Workshops and Summits at an Artificial Intelligence non-profit organization (Stockholm AI).

Veoneer AB

Research Engineer Summer Intern

📅 Jun 2019 – Aug 2019 📍 Stockholm, Sweden

- Development of Deep Neural Network Architectures using YOLOv3 for detection, and LSTM/Markov Decision Processes (MDP) for tracking multiple objects using Python, Keras and Tensorflow.

Uppsala University

Teaching Assistant

📅 Jun 2018 – Jan 2020 📍 Uppsala, Sweden

- Teaching Laboratory of Mechanics for Engineering (Reports in Swedish)

UFBA/AREA1-Devry University

Lecturer in Physics

📅 Jun 2013 – Jan 2016 📍 Salvador-BA, Brazil

- Lecturer in Physics I, II, and Mechanics of Materials I and II (Portuguese)

LIFE PHILOSOPHY

"Dream + Reality + Determination = Successful Life." – Principles, Ray Dalio

RECENT CERTIFICATES

Deep Learning Specialization

Coursera, DeepLearning.AI

📅 Nov 2020–Jan 2021 📄 [📄 Certificate](#)

- Neural Networks and Deep Learning.
Credential ID: C33QNMKHF2CM [📄 Certificate](#)

- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization.
Credential ID:XTNBALTEQEL2 [📄 Certificate](#)

- Structuring Machine Learning Projects.
Credential ID:2NKFZFKHVUHS [📄 Certificate](#)

- Convolutional Neural Networks.
Credential ID:J6GUN5TWZD78 [📄 Certificate](#)

- Sequence Models.
Credential ID:XZMQDXUKU9Y6 [📄 Certificate](#)

Reinforcement Learning Specialization

Coursera, Alberta University

📅 Feb-Feb 2021

- Sample-based Learning Methods.
Credential ID:GQB568NJ8L7D [📄 Certificate](#)

- Fundamentals of Reinforcement Learning.
Credential ID:M58UN4QTX798 [📄 Certificate](#)

Software Product Management

Coursera, Alberta University

📅 Oct–Nov 2020

- Introduction to Software Product Management.
Credential ID: MUXCGPZSCHRY [📄 Certificate](#)

- Software Processes and Agile Practices.
Credential ID:3G9BYPSW7SBG [📄 Certificate](#)

ONGOING PROJECTS

 Oxaala AI

Founder

 Feb 2021 – Present

 Uppsala, BASE10, Sweden

- Intelligent Systems for Decision Making

PUBLICATIONS

1. Silva, J.L. et al, 2019. X-ray Photoelectron Fingerprints of High-Valent Ruthenium-Oxo Complexes Along the Oxidation Reaction Pathway in Aqueous Environment. JPCL. [Download](#)

Link:  <https://pubs.acs.org/doi/abs/10.1021/acs.jpcllett.9b02756>


2. Silva, J.L., et al., 2020. $g-C_3N_4$ hybrid electrocatalyst for efficient hydrogen evolution reaction. JPCC [Download](#)

Link:  <https://pubs.acs.org/doi/10.1021/acs.jpcc.9b11982>

3. Zhou, Y., Silva, J.L., et al., 2018. Revealing the contribution of individual factors to hydrogen evolution reaction catalytic activity., Advanced Materials. [Download](#)

Link:  <https://doi.org/10.1002/adma.201706076>


4. Zhou, Y., Pondick, Silva, J.L., et al., 2019. Unveiling the Interfacial Effects for Enhanced Hydrogen Evolution Reaction on MoS₂/WTe₂ Hybrid Structures., Small. [Download](#)

Link:  <https://doi.org/10.1002/sml.201900078>

5. Zhou, Y., Silva, J.L., et al., 2018. Spectroscopic fingerprints of intermolecular H-bonding interactions in carbon nitride model compounds., ChemEurJ. [Download](#)

Link:  <https://doi.org/10.1002/chem.201802435>

6. Mariia V. Pavliuk, Sol Gutiérrez Álvarez, Yocef Hattori, Maria E. Messing, Joanna Czapla-Masztafiak, Jakub Szlachetko, Silva, J.L., et al., 2019. Hydrated Electron Generation by Excitation of Copper Localized Surface Plasmon Resonance., JPCL. [Download](#)

Link:  <https://doi.org/10.1002/adma.201706076>

RECOMENDATIONS

Associate Prof. Carlos Moyses

 UU/Karlstad University, Sweden

 moyses.araujo@kau.se

[Recommendation Letter](#)

Prof. Antonio Ferreira da Silva

 UFBA, Brazil

 afsilva@ufba.br, ferreira.fis@gmail.com

[Recommendation Letter](#)

Data Science and Simulations

 2016, 2017

- Introduction to Data Science (Spark, Hadoop, Python). [Certificate](#)
UU, SEB, Databricks, Combient, 2017, Sweden
- SUNCAT Summer Institute. [Certificate](#)
Stanford University, 2017, USA
- Introduction to High Performance Computing. [Certificate](#)
KTH, Stockholm, 2016, Sweden
- Multiscale Computational Modelling of Materials for Energy Applications. [Certificate](#)
ICTP, Trieste, 2016, Italy

STRENGTHS

C/C++

Python

Matlab

Unix

Keras

Tensorflow

Machine Learning

Deep Learning

Data Analysis & Analytics

Optimization

AI

Software Development

Leadership

Statistics

Physics

Product Management

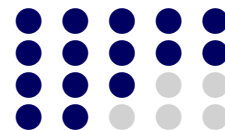
LANGUAGES

Portuguese

English

Spanish

Swedish



LEADERSHIP SKILLS



Project Management

Leading the computer simulations of six projects resulting in high-profile publications, and management of technical workshops at Stockholm AI.



Communication/Public Speaking

Easy work dynamics across international and multi-disciplinary teams. Teaching, coaching and speaking for broader/technical audiences in international conferences, and University.



Writing Skills

Concise and result-driven reports, and articles published in international Journals.