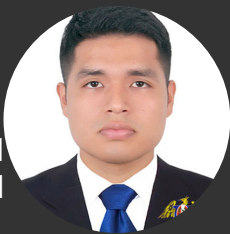


LUIS ANTONIO ORBEGOSO MORENO



Mechatronic Engineer with great interest and knowledge in the area of robotics, control and automation. With the ability to investigate, learn and apply my knowledge in the professional field, always innovating and looking for the best solutions.

CONTACT

- ✉ lorbegoso@unitru.edu.pe
- ☎ +51 973 003 961
- 📍 Florencia de Mora, La Libertad, Perú
- 📱 LuisAntonio1929
- 🌐 Luis Orbegoso
- 📞 0000-0002-9751-0589

SKILLS

Programming

Python

(matplotlib, scipy, sympy, pandas, opencv, keras, tensorflow, numpy, django, ...)

C++

HTML

CSS

JavaScript

LaTeX

Operative Systems

Linux

(Ubuntu, Raspbian, ROS)

Windows

Software & Tools

Office automation

(Microsoft Excel, Word, PowerPoint; Google Docs, Sheets, Slides, Forms, ...)

Matlab and Simulink

Fusion 360

(CAD, CAM and CAE)

Arduino

GitHub

Aptitudes

Punctuality

Fast learning

A-1 driver's license

Work under pressure

Professional and polite treatment

Languages

Spanish

English

Portuguese

CERTIFICATES

- TOEFL iBT 92
- RENACYT Researcher

EDUCATION

- 04/05/2024 - 20/12/2025
National University of Trujillo (UNT), Trujillo, Peru
Master in Mathematical Engineering
- 20/09/2023 - 25/03/2024
Fusemachines, New York, USA
Microdegree in Artificial Intelligence
- 12/04/2018 - 27/01/2023
National University of Trujillo (UNT), Trujillo, Peru
Bachelor in Mechatronic Engineering

ACHIEVEMENTS, HONORS AND RECOGNITIONS

- 🏆 Best Paper Award at 2023 IEEE Colombian Caribbean Conference (C3)
- 🏆 Professional degree thesis in Mechatronic Engineering with honors
- 🏆 Ranked first in the XI graduating class of Mechatronic Engineering
- 🏆 Researcher in training in the ARCAM group 2023
- 🏆 Ranked first in Mechatronics Engineering Undergraduate Admission

LABOR HISTORY


- 23/09/2023
UNT, Trujillo, La Libertad
IEEE RAS UNT Research Committee Director
- 19/05/2023 - 01/09/2023
LatinHire
Online Tutor of University Subjects
- 23/05/2022 - 06/01/2023
UNT, Trujillo, La Libertad
University Social Responsibility
- 26/09/2022 - 06/01/2023
UNT, Trujillo, La Libertad
Teaching Assistant in Robotics
- 23/05/2022 - 09/09/2022
UNT, Trujillo, La Libertad
Teaching Assistant in Power Electronics
- 15/03/2022 - 30/06/2022
DELION S.A.C., Trujillo, La Libertad
Hardware developer


COURSES


- Code Foundation for ROS
- ROS1
- C++
- C
- C#
- Python
- Java
- Data Science
- Machine Learning
- PHP
- CSS
- HTML
- JavaScript
- Introduction to IoT
- Introduction to Cybersecurity
- NDG Linux
- S7-1200 PLC
- Django
- IEEE English for Technical Professionals
- Microsoft Excel


PUBLICATIONS

Automatic differential kinematics of serial manipulator robots through dual numbers


 **Orbegoso Moreno L.A.** & Valverde Ramírez E.D.


 18/10/2024


 Transactions on Energy Systems and Engineering Applications (TESEA)


 [TESEA](#)

An Integrated Approach to Robotic Joint Interpolation: Kinematic Modeling and Constraints for Smooth Trajectories


 **Orbegoso Moreno L.A.**, Valverde Ramírez E.D., Ruiz Rodríguez J.L. & Miñano Corro I.D.


 28/06/2024


 2024 47th MIPRO ICT and Electronics Convention (MIPRO)


 [IEEE Xplore](#)

Direct Calculation of the Jacobian Matrix: Leveraging Dual Numbers in Robot Forward Kinematics


 **Orbegoso Moreno L.A.**, Valverde Ramírez E.D. & Paredes Paulini W.I.


 21/02/2024


 2023 IEEE Colombian Caribbean Conference (C3)


 [IEEE Xplore](#)

Comparative Study of Iterative Methods for Inverse Kinematics of Redundant Serial Robots with Increasing Degrees of Freedom


 **Orbegoso Moreno L.A.**, Valverde Ramírez E.D., Pasco Sanchez J.M. & Ruiz Rodríguez J.L.


 02/02/2024


 2023 IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC)


 [IEEE Xplore](#)

Potato Leaf Disease Detection: Comparative Study of the Performance of CNN Architectures - VGG19, ResNet50 and DenseNet201


 Ruiz Rodríguez J.L., Ruiz Rodríguez J.M., Pasco Sanchez J.M., **Orbegoso Moreno L.A.**, Miñano Corro I.D. & Valverde Ramírez E.D.


 23/01/2024


 2023 9th International Conference on Signal Processing and Intelligent Systems (ICSPIS)


 [IEEE Xplore](#)

Approach to Inverse Dynamics Model for a Serial 3 DoF Robot Using Neural Networks


 **Orbegoso Moreno L.A.**, Valverde Ramírez E.D., Ruiz Rodríguez J.L. & Pasco Sanchez J.M.


 12/01/2024


 2023 IEEE 5th Eurasia Conference on IOT, Communication and Engineering (ECICE)


 [IEEE Xplore](#)

Geolocation and Virtual Reality to Streamline the Management of Hydrographic Basins of the Regional Agriculture Management of La Libertad - Peru


 Miñano Corro I.D., Sanchez Peralta W.C., **Orbegoso Moreno L.A.**, Ruiz Rodríguez J.L., Pasco Sanchez J.M. & Valverde Ramírez E.D.


 08/11/2023


 2023 7th International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT)


 [IEEE Xplore](#)

Poultry Egg Classification System Using Deep Learning


 Pasco Sánchez J.M., **Orbegoso Moreno L.A.**, Ruiz Rodríguez J.L. & Miñano Corro I.D.


 26/06/2023


 2023 5th International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA)


 [IEEE Xplore](#)

An adaptation of FABRIK algorithm for serial robot's inverse kinematics


 **Orbegoso Moreno, L.A.** & Alva, A.


 30/11/2022


 2022 IEEE International Conference on Engineering Veracruz (ICEV)


 [IEEE Xplore](#)

Control cinemático para un robot cuadrúpedo usando el Método de Newton-Raphson

 **Orbegoso Moreno, L.A.**, Rodríguez, C. & Valverde, E.

 26/04/2021

 Revista elektron Vol. 5, No. 1, pp. 77-82

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