DANIEL ALVARADO PELÁEZ

MECHATRONIC ENGINEER UPDATED: 28/03/2023

PERSONAL PROFILE

Mechatronic Engineer with skills in 3D design, web and application programming, data science and analysis, and embedded systems development. Skilled in work and autonomous learning, predisposed to work in multidisciplinary teams to share, improve or learn various knowledge.

PERSONAL INFORMATION

- Daniel Andrés Alvarado Peláez
- Ecuador - Guayaquil
- 24/03/1999
- daap21.3@gmail.com
- +593 93 959 1478
- [/Daniel-Alvarado-Peláez](#)
- [/daap213](#)
- [daap213.github.io/Portafolio_Astro/](#)

PERSONAL SKILLS

Teamwork
Commitment in tasks
Learning capacity
Analysis capacity
Orientation to results

TECHNICAL SKILLS

Office package
Git
MySQL
JAVA Programming
python programming
C/C++ Programming
HTML programming
3d design

PROFESSIONAL EXPERIENCE

Designer/Programmer of drone with thermal module

ESPOL - Thesis
Guayaquil - Ecuador
OCT 2022 - FEB 2023

- Design of a chassis and system for a low-cost, medium-sized remote-controlled drone.
- Design of an embedded system for monitoring power cables in industry.
- With a Raspberry Pi 4, an HD camera and a thermal camera module, a .py program was created, using a model trained for recognition, detects if there are cables present and if a certain configured temperature is exceeded in the area, to save and share said information to a Telegram Bot.

Research Assistant (Development Technician)

Centro de Tecnologías de Información (CTI),
Guayaquil - Ecuador
MAR 2022 - APR 2022

- Development of prediction models for the energy consumption of the infrastructure of a Data Center, developing Jupyter notebooks for pre-processing, data processing, execution of the different models, and display and comparison of the results.
- Review and improvement of the application to obtain data from the equipment.

Renewable Energy Rice Piller Designer

Community practices, Guayaquil - Ecuador
MAY 2021 - SEP 2021

- For an agricultural community, the feasibility of manufacturing a rice mill powered by renewable energy was analyzed. Existing rice mills were investigated, in addition to the use of renewable energy. Subsequently, a design and dimensioning was carried out according to the needs of the community.

TECHNOLOGICAL TOOLS

Autodesk Inventor

Autodesk AutoCAD

Automation Studio

CADe Simu

CCW (Connected Components Workbench)

FluidSIM

Framework Laravel

MATLAB & Simulink

LabVIEW

TIA Portal

Proteus

FlexSim

Laragon

XAMPP

HeidiSQL

HARDWARE TOOLS

Arduino

Raspberry Pi

ESP32 - 8266

PLC Siemens

PLC Logo

LANGUAGES

Native Spanish

Advanced English

Web programmer
Edu4lab, Durán - Ecuador
MAY 2021 - JUL 2021

- Design with the Laravel framework, an educational web platform was developed, with the functionalities of creating, profiles and roles, and online tests, associated with books, courses and managers.

SCIENTIFIC PUBLICATIONS

Available in: [Link](#)
R. Estrada, V. Asanza, D. Torres, I. Valeriano and D. Alvarado, "Comparison of Traditional ML Algorithms for Energy Consumption Prediction Models," 2022 IEEE Future Networks World Forum (FNWF), Montreal, QC, Canada, 2022, pp. 232-237, doi: 10.1109/FNWF55208.2022.00048.

EDUCATION

Superior Education, Mechatronics Engineering
Escuela Superior Politécnica del Litoral, Guayaquil- Ecuador / OCT 2017- FEB 2023

Primary - Secondary education
Unidad Educativa FAE N°2,
Guayaquil- Ecuador / MAY 2005- FEB 2017

CERTIFICATIONS

Despliegue de MySQL con Docker
MAR 2023

Python para data scientist avanzado
FEB 2023

Docker esencial
FEB 2023

Learning Docker
FEB 2023

OPENedX Escritura Académica
JAN 2023

Examen CAMBRIDGE ENGLISH PLACEMENT TEST, C1
DEC 2022

Cuarta revolución Industrial: Data science
FEB 2022

Aprende Excel (Office365/Microsoft365)
FEB 2022

Cómo eliminar las distracciones
FEB 2022

Cómo conciliar las funciones múltiples del líder
FEB 2022

Introducción a la programación en Python
APR 2021

Fundamentos de progromación en PLC
SEP 2021

Python para data science y big data ecencial
SEP 2021

MATLAB Onramp
OCT 2020

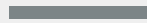**Certificate of Competency in English, ECCE B2**
MAY 2017

Certificado de graduación, CEN
NOV 2017

[Link to certificates](#)

R E F E R E N C E S

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