José Ángel Olmedo Guevara

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ABOUT ME

Mechatronics Engineering student with a strong interest in technological development, particularly in areas such as manufacturing, IoT, automation, and software development. Advanced English proficiency (C1) and experience in multidisciplinary technology projects focused on innovation and integrated solutions.

EDUCATION

Mechatronics Engineering 2019 – 2024
National Autonomous University of Mexico (UNAM)

SOFT SKILLS

Self-taught || Teamwork || Proactivity || Effective communication || Time management || Adaptability

TECHNICAL SKILLS

- **Languages:** C, C++, C#, Java, Python, LaTeX, Markdown.
- **Databases:** MySQL, PostgreSQL, SQLite.
- **Microcontrollers:** Arduino, Raspberry Pi Pico, ESP32.
- **Tools:** Git, GitHub, BitBucket, Jira, Confluence, Power BI, Trello, Autodesk Inventor, ProModel, Fusion 360, Proteus, Multisim, Wolfram, Matlab, Office Suite (Excel, Word, PowerPoint).
- **Data & AI:** NumPy, Pandas, PyTorch, OpenCV.
- **Web:** HTML, CSS, Flask, Tkinter.
- **OS:** Windows, Linux (Ubuntu, Debian, Fedora).

EXPERIENCE

Programming Analyst - Banamex June 2024 – January 2025
Automation of banking EUC processes using SAS and Python.
Development of dashboards (Python/Excel/Power BI) for banking analysis with SQL queries and specialized Excel reports.
Coordination of cross-functional teams to support Citibanamex's System Development Framework certification.

Social Service Intern - IIMAS/UNAM January 2024 – June 2024
Development and implementation of motion algorithms for mobile robots (Potential Fields, A*, Dijkstra).
Spectrogram visualization (Python) for voice identification.
Technical support in computer labs (hardware maintenance, OS installations, printer repairs).

Math/Physics Tutor January 2023 – January 2024
Academic support for K-12 and undergraduate students.
Test preparation for COMIPEMS and university entrance exams (IPN, UNAM).

LANGUAGES

English: C1 (Advanced)

VOLUNTEERING

SIAFI - Artificial Intelligence Society, Faculty of Engineering August 2022 – August 2023

Gesture-Controlled Autonomous Drone Development
- Developed computer vision system using OpenCV for real-time gesture recognition
- Implemented machine learning algorithms with Scikit-learn for movement prediction
- Integrated hardware control using Raspberry Pi and flight controllers

Mexican Sign Language Translation System
- Designed neural network architecture with PyTorch for gesture classification
- Developed machine learning pipelines using Scikit-learn
- Created computer vision solution for real-time sign language interpretation

KEY PROJECTS

- 6-DOF Bluetooth-controlled serial robot (C++/Arduino)
- Passenger registration system with SIGFOX and mobile app
- Glaucoma prediction model using machine learning (Python)
- Feedback controller design for inverted pendulum (Matlab)
- Design and manufacturing of CNC-machined parts (lathe, milling, 3D printing)
- IoT environmental monitoring system with web interface (Flask, HTML, CSS, Python, Arduino)
- Data analysis implementations and algorithm design (search, sorting, ML) in Java, Python, C++

COURSES

- Play It Safe: Manage Security Risks (Coursera, 11h)
- Foundations of Cybersecurity (Coursera, 6h)
- AI Macro Training (20h) - Latin American University Network
- Getting Started with Power BI Desktop (Coursera, 2h)
- Robotics (20h) - Applied Robotics and Technology Association (ARACT)