CHARLES N. CHANO

Test Engineer

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ABOUT ME

As a recent Robotics Engineer M.S. graduate, I bring a solid background in quality control for aerospace manufacturing and automotive powertrain development. Throughout my professional journey, I have consistently introduced innovative solutions, optimized workflows, and elevated the overall quality of products and systems, all while ensuring maintainability. My decision-making process is rooted in data-driven insights and past experiences, enabling me to successfully implement impactful changes. I take pride in my commitment to making improvements that benefit everyone involved.

Key proficiencies include Python programming, expertise in testing and data analysis, as well as advanced skills in system modeling and control.

SKILLS

- Matlab
- Python
- C++
- Microsoft Visual Basic
- Failure Modes Analysis
- Quality Specification Dev.
- HIL Testing
- Neural Networks
- Data Acquisition

LANGUAGES

- English (Native)
- Spanish (Native)

CERTIFICATIONS

- Engineer-In-Training (California)

EDUCATION

Warsaw University of Technology
Robotics Engineering M.Sc. | Sept. 2020 – Sept. 2023
- ***Master Thesis:*** *UAV Decentralized Formation Flying for Surveying Missions, Using Behavioral Techniques – Developed and simulated a formation of non-linearly modeled quadrotors with ROS2 [Python]/Gazebo, assessing their performance in emergency scenarios like earthquake response.*

California State Polytechnic University, Pomona
Mechanical Eng. B.Sc. | Sept. 2014 – June. 2017
Baja, Society of Automotive Engineers | Electrical Lead
- Developed and validated a PID-controlled continuously variable transmission within 9 months, contributing to a 3rd place finish in the vehicle design competition among 100 universities.
- Oversaw the procurement and utilization of all data acquisition systems for planned test scenarios involving powertrain, suspension, and chassis sub-systems.

EXPERIENCE

RBC, Transport Dynamics (Aerospace) | Santa Ana, CA, USA 92704
Quality Engineer | April 2019 – May 2020
- Spearheaded the automation of bearing conformance tests, resulting in a 20% boost in repeatability and a significant reduction in human errors during readings.
- Coordinated between design and manufacturing departments to establish unified quality guidelines, reducing product scrap rate by 20%, all in preparation for automated visual inspection.

Manufacturing Engineer | September 2018 – April 2019
- Slashed product line scrap rates by 80% through precise data-driven root cause analysis and strategic tooling enhancements.
- Overhauled the maintenance procedures and documentation in the swage die cell, leading to a substantial 70% decrease in scrap rates.

Gale Banks Engineering (Automotive) | Azusa, CA, USA 91702
Test Technician | January 2018 – September 2019
- Performed product development testing for electrical and mechanical products, utilizing both test benches and vehicles.
- Streamlined consumer installation manual development, reducing editing time by 50% through effective coordination between media and engineering departments.