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**afael Facunla Mechanical Engineer**

1-31 Nishi Terao, Kanagawa-ku, Yokohama • Kanagawa, Japan

(+81)70-4440-2707 • Eensy.el@gmail.com

*A licensed mechanical engineer and licensed master plumber. Familiar with ASHRAE, UPC, ASME, ASTM, JPI and JIS industrial standard. Have thorough knowledge in pipeline route and profile design; piping drawings including section and plan drawings, isometric drawings, P&ID and PFD; have diversified exposure in 3D model, design and machining of mold assembly; knowledgeable in industrial robot programming, installation and commissioning; have knowledge in data science and computer programming.*

*Technical Skills:*

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| * **Piping/Pipeline Design** | * **Robotics** |
| * **Plastic Mould Design** | * **Manufacturing** |
| * **HVAC Design** | * **Data Science** |
| * *Catia V5: CATVBA* | * *AutoPIPE/ MicroStation* |
| * *AutoCAD: AutoLISP* | * *Python3/ SQL Database/ MATLAB* |
| * *Unigraphics NX11/ SolidWorks* | * *RobotStudio: Rapid* |

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| **Work Experiences** |

**Nissan Motors K.K. • Kanagawa, JP • Jan 2019 – Present**

**Mechanical Engineer (Powertrain Production Division)**

Responsible for machine design and robot program changes. Provides support in creation of automated reports using VBA and other programming language as required.

Executed the following job functions:

* Create reports by performing manufacturing data analysis and on-site inspection
* Improve production cycle time by analyzing and modifying robot programs
* Analyze manufacturing defects and recommend solutions
* Create 2D/3D drawing of parts design
* Documentation

*Technical Skills: Karel/Python/Java/VBA, Data Science*

**Reason for leaving**: Professional growth and career advancement

**Applicot K.K. • Kanagawa, JP • Sep 2018 – Jan 2019**

**Combustion Engineer (Engineering department)**

Responsible for direction, coordination, implementation and control of projects related to flare system, burner and incinerator.

Executed the following job functions:

* Determine project schedule by studying project plan and specifications; calculating time requirements; sequencing project elements
* Maintain project schedule by monitoring project progress; coordinating activities; resolving problems
* Controls project plans by reviewing design, specifications, and plan and schedule changes; recommending actions
* Checks designs an coordinates with manufacturers and various vendors
* Documentation

*Technical Skills: Project Management, Manufacturing and Technical Understanding, MS Project*

**Reason for leaving**: Pursue career in design/robotics engineering

**ABB K.K. • Tokyo, JP • Jul 2017 – Sep 2018**

**Field service Engineer (robotics and motion division)**

Responsible for painting and sealing system using ABB robots. Handles system configuration and troubleshooting of ABB Robots and equipment in the field. Provides system integration support of ABB robots to designated build shops as well as the end user.

Executed the following job functions:

* Creation of prototype models or simulated systems for painting and sealing robots
* Robot program and changes such as logic and path alterations through either

online or offline method

* Conduct tests or experiments requiring selection and adaptation or modification of equipment and procedures.
* Direction, analysis and reports of test projects
* Robot system installation, commissioning and troubleshooting
* Documentation

*Technical Skills: Rapid/Python, Linux, Networking, RobotStudio, Robview, Shopfloor*

**Reason for leaving**: Professional growth and career advancement

**JFE Techno Manila, Inc. • Pasig City, PH • Dec 2014 – Mar 2017**

**Mechanical Engineer (Pipeline Section)**

Responsible in the preparation of alignment sheet (pipeline route and profile planning), station piping drawings (plan, section and isometric drawings) and detail design including material take-off.

Executed the following job functions:

* Piping space design, stage design, support and nozzle detail drawings, equipment layout and MTO
* Pipeline route and profile design based on customer requirements, specification, and industrial code and standard (ANSI, ASME, JPI, JIS, etc.)
* Determine steel shapes, structural connections and welding symbols
* Creation of AutoPIPE model, pipe loading, displacement, and stress analysis report
* Creation of mechanical equipment and structural drawings
* Interpret piping symbols, equipment symbols, and basic instrumentation symbols.
* Represents group in internal meetings, update work related manuals and documents, and conduct work related seminars

*Technical Skills: AutoCAD, AutoPIPE, MicroStation, AutoLisp, Excel VBA*

**Reason for leaving**: Career advancement in a more challenging environment.

**MANLY PLASTICS, INC. • Malabon City, PH • Jun 2014 – Nov 2014**

**Mold design Engineer (Mold Design Department)**

Responsible in preparing precision mold design including material selection, CAD drafting, detail product drawings and BOM’s.

Executed the following job functions:

* Directly involved in mold manufacturing from material preparation through to completion
* Coordinated with the toolmaker to verify the inserts, pins, fixtures, and components and prepared necessary reports to ensure quality before assembly
* Coordinate development with engineers and technicians on the team mentoring as needed
* Work with customers for development projects as well as product troubleshooting

*Technical Skills: AutoCAD, Pro-E, CNC/EDM, GD&T*

**Reason for leaving**: Career advancement in a more challenging environment.

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| **Education** |

**Bachelor of Science in Mechanical Engineering**

TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES | Quezon City, PH

2008 – 2013

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| **Licenses and Certificates** |

**Registered Mechanical Engineer**

Professional regulation commiSsion | License 0085915

**Registered Master Plumber**

Professional regulation commisSion | License 0008104

**Autodesk Revit MEP 2016**

MIcrocadd institute | Certificate 1BRSGQ14B3

**Deep Learning Specialization**

Coursera | Certificate 8HVN2UAFZXP9

**TensorFlow Developer Professional Certificate**

Coursera | Certificate XKP2X9WQT7FQ

**Machine Learning with Python**

Coursera | Certificate AHUMC4ZAJNF6

**Data Analysis with Python**

Coursera | Certificate H5CGBXMZBP89

**Data Visualization with Python**

Coursera | Certificate 7E97KH88UGV9

**Database and SQL for Data Science**

Coursera | Certificate M96W96NFB7C5

**Python for Data Science and AI**

Coursera | Certificate T36DZU9VX5HX

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| **Languages** |

**ENGLISH**

Professional Working Proficiency

**FILIPINO**

Native Speaker with Full Working Proficiency

**JAPANESE**

Basic with Limited Working Proficiency

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| **Other Skills** |

* **CatiaV5/SolidWorks/UG-NX11/Autodesk Inventor**

Can create part drawing model and assembly. Can utilize Finite Element Analysis and relative simulations. Knowledgeable in Catia VBA programming.

* **Autodesk Revit MEP**

Knowledgeable in Building Information Modeling, HVAC calculations, defining volume, defining work sets, import/export settings, etc.

* **PLC programming**

Knowledgeable in ladder logic, HMI development, interlocks, alarms and notifications.

* **CNC Programming/Operation**

Can perform machining setup and simple manual G-code programming. Knowledgeable in CNC lathe and sink EDM.

* **MATLAB**

Knowledgeable in MATLAB programming. Proficient in working with vectors, matrices, graph and graph plotting, data importing, and MATLAB mathematics.

* **NI Multisim**

Knowledgeable in analog or digital circuits design, analysis, and spice modeling.

* **Microsoft Office**

Proficient in Microsoft Word, Excel, Project and PowerPoint. Knowledgeable in VBA programming.

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| **Trainings and Webinars Attended** |

**PLC Programming**

Udemy

**HVAC Design, Installation & Maintenance**

MEPFS Engineer Review

**Multi-Discipline Design: Reducing Risks, Improving Collaborations, and Winning Projects**

Engineering News-Record & Bentley

**Construction Quality and Safety: Reducing Rework while Achieving Zero Incidents and Accidents**

Engineering News-Record & Procore

**Five Questions to Ask When Selecting a New Project Management System**

Engineering News-Record & Procore

**PM in Theory - Improving Quality Using Six Sigma Concept**

Project Insights

**Introduction to SimCenter for Predictive Engineering Analytics**

Engineering 360 & Siemens

**CompTIA A+ / Crptography / CompTIA Security+**

Cybrary

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| **Personal Information** |

**Full Name:** Facunla, Rafael Sumang

**LinkedIn:** https://ph.linkedin.com/in/rafaelfacunla

**Date of Birth:** January 15, 1991

**Nationality:** Filipino

**Age:** 30

**Height:** 165 cm

**Weight:** 60 kg

**Civil Status:** Single