

ALDO JUAN ROOS



MECHANICAL ENGINEER

CONTACT

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- [LinkedIn – Aldo Juan Roos](#)
- Valkenswaard, Netherlands
- Afrikaans, English, Dutch
- [Online Portfolio](#)

EDUCATION

BACHELOR'S DEGREE,
Mechanical Engineering (Hons)
North West University: Potchefstroom
Jan 2014 — Nov 2018

MASTERS DEGREE,
Business Administration
IU of Applied Science
Sept 2023 — Sept 2025

PRINCE2 PRACTITIONER:
PROJECT MANAGEMENT,
AXELOS
2024

LEAN SIX SIGMA: Black Belt,
LEAN MANAGEMENT &
MANUFACTURING EXPERT
Six Sigma Academy Amsterdam
2024

SKILLS

| Technical

- Microsoft Office Suite
- CAD (Solidworks, Siemens NX, etc.)
- Full Stacks Development
- SQL, Python, JavaScript, VBA, etc.
- Matlab and EES
- Petrol and Diesel Mechanics
- Fitting and Turning
- Kanban and ERP

SUMMARY

I am a detail driven Mechanical Engineer, looking for an opportunity to grow with a company that encourages "outside the box" thinking and innovation. I have a very good track record of successfully creating innovative and exceptional engineering solutions with my problem-solving skills and "can do" attitude. I consider myself a very flexible engineer with a vast array of engineering skills. With the correct attitude of collaborating and "not giving up", combined with my appetite to learn, I am a one in a million engineer and can back it up.

I am an extrovert. My hobbies include: cars, motorcycles, MTB, fishing, hunting, drone flying, traveling and coding. I am also a huge Star Wars & Rick and Morty fan. I think I have a good sense of humor, but my wife thinks otherwise.

WORK EXPERIENCE

SENIOR MANUFACTURING ENGINEER

ELEO | July 2024 — Current

ELEO is an innovative startup company servicing the off-highway energy pack market. With the backing of Yanmar, who is one of the world's leading ICE manufacturers, Eleo is developing the future platform for construction vehicles to go full electric. My role includes the following:

- The design and manufacturing of precision tooling, grippers, structural supports, alignment tooling and MFE designing enhancements.
- Guiding the team as a senior member to implement good engineering practices and ensure efficient manufacturability.
- Project Manager on the Automation project for our Manufacturing Line, to the value of approximately €24 mil.
- Support of design of manufacturing equipment to be introduced.
- Define, mitigate and control Special Characteristics of Integrated energy pack, and all components, from a design and Manufacturing perspective.
- Manage stakeholder communication both internal and external.

MECHANICAL R&D ENGINEER

META (Facebook) | Jan 2023 — June 2024

Meta's Reality Labs division is a market leader in the AR/VR, with an 80% market share. Also responsible for devices such as Meta Quest 2, Quest Pro, Ray-Ban Stories etc. Some of my key Roles and Responsibilities:

- Responsible for Research and Development for new technology introduction of 3D printing of optics into future products.
- Managing cross functional projects, with teams in US, managing stakeholders and project parameters (Scope, Time, Cost, Quality).
- Technical lead on Pre-Production line of 17 operators, producing 24/7. (Produced 40 000 units in 3 months)
- Introducing process improvements according to Six Sigma and Lean Management principles.
- Responsible for Optical Metrology, and introduction of Quality system for pre-production line.
- Design and analysis of parts for Femto-laser, and operation thereof.

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SKILLS

| Professional

Project Management

Communication (Written and Verbal)

Adaptability

Analytical Skills

Time Management

Negotiation

Team Work

Attention to Detail

REFERENCES

Guido Groet

Meta
Manager AdOpt Team
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E: Guidogroet@meta.com

Deon Beukes

Meta
Production Engineer
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Dimitrios Kaparos Tsafos

WEB Eindhoven
Project Manager
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Sven Breedt

Grinding Techniques
Process Specialist
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WORK EXPERIENCE CONTINUED

INDUSTRIALIZATION ENGINEER

WEB Eindhoven (ASML Farmout) | May 2022 — Jan 2023

ASML leads in semiconductor manufacturing technology, crafting state-of-the-art machines crucial for creating powerful computer chips. Forbes 500, No. 1 Future brand. My responsibilities included:

- Implementation of FMEA and AVAS parts in EUV 5nm systems.
- DDF creation for in field diagnostics and troubleshooting.
- Creation of Risk assessments for project scope.
- Creation and improvement of procedure (SOP/WI) in Beam transport and Source Functional Cluster.
- Driving team collaboration improvement initiative 50 team members.
- Learning and implementing the fundamentals of the V model.
- Working in large teams to realize project goals and balancing 3 parameters of project management throughout the process.

MECHANICAL DESIGN ENGINEER

Pratley | Oct 2019 – Apr 2022

Pratley is the first and only South African company to have a product on the Moon. Developers of the first ever Epoxy glue putty. My main responsibilities where:

- Conceptual designs, rapid prototyping, development and testing, costing, production line setup and implementation of procedures for 3 new product ranges per year (approximately 147 individual parts).
- Research, Development and Design of market leading product ranges (Design Engineer for a patented World first product – [Pratley Flameproof Enviro Box](#)).
- International product certification (IECEX, ATEX, SABS, SANS, UL, BS)
- Product analysis, testing, improvement and optimization.
- Improving and maintaining repeatable quality standards in products, production line and processes.
- Responsible for Management and Development of dynamic, data base driven websites/web applications for (5) divisions of company group ([www.pratley.com](#) and all subdivisions of Pratley).

PROJECT ENGINEER

Betterect Engineering | Jan 2019 — Sept 2019

Betterect specializes in Manufacturing and Erection of steel structures for the mining Industry. Betterect collaborates with companies like FLSmidth to build plants for Sibanye Stillwater and Anglo Gold, among others. My main responsibilities at this company included:

- Compliance and implementation of contractual agreements/administrative requirements pertaining to multiple projects (Project to the value of 6 mil ZAR)
- Project estimation, costing and tender applications (approximately 7 projects per month).
- Project Resource Co-ordination and supply chain liaison for team members and resources.
- Project resource allocation management and planning. Ensuring effective resource usage throughout project life cycle.
- Enforcing safety standards in factory environment and on-site project.
- Cross-team schedule planning and management (6 people per project on 5 different projects).

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REFERENCES

Kenneth Clarke

Betterect Engineering
Manager
T: +27 60 972 7021

Pieter Tolmay

North West University Potchefstroom
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CP Kloppers

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Senior Lecturer
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WORK EXPERIENCE CONTINUED

JUNIOR MECHANICAL ENGINEER

PPE Technologies | Dec 2018 — Jan 2019 **(Internship)**

During my time at PPE Technologies, I was subcontracted to a company called DCE, which was the Engineering firm tasked with attending to all engineering consulting at Sappi Ngodwana, which is the largest paper plant in Africa.

My responsibilities were:

- Mechanical Engineering design and optimization.
- FMEA on existing structures and components.
- FEM analysis on Engineering components for design optimization.
- Draughting of mechanical drawings, engineering calculations and equipment testing reports.

ENGINEERING CONSULTANT

Barbrook/Nkomati Mine | 2017 — 2018 **(Part time)**

During my studies, I consulted for multiple gold mines in the Barberton region. Some responsibilities this work entailed were:

- Stress and flow Simulations for feasibility studies of large-scale implementation of new mining equipment.
- Engineering Design, validating, optimizing and testing of Mining equipment.

STUDENT FACILITATOR

North West University - Potchefstroom | 2016 — 2018 **(Part Time)**

During my studies, I worked part time for multiple engineering modules. Some aspects of this included:

- Mentor and Instructor in the training workshop. Training +- 380 students per year on how to operate a milling machine and a lathe.
- FIAP Mentor for first year students. Project planning and management.
- Responsible to enforce and maintain safety in workshop.

PROFESSIONAL DEVELOPMENT

**LEAN SIX SIGMA: BLACK BELT
LEAN MANAGEMENT &
MANUFACTURING EXPERT**
SIX SIGMA ACADEMY AMSTERDAM
[Certification 1](#), [Certification 2](#)
April 2024

**EX MANUFACTURE,
INSPECTION & REPAIR**
EXPLOLABS
4 May 2021

SOLDIWORKS ASSOCIATE
DASSAULT SYSTEMS
[C-VXE9427A2R](#)
29 April 2014

**PRINCE2 PRACTITIONER:
PROJECT MANAGEMENT**
AXELOS
[GR656323477AR](#)
March 2024

ACHIEVEMENTS

DESIGN PATENT ON WORLD FIRST PRODUCT
Pratley / Krugersdorp / South Africa / 2022