

Joseph Thomas Thekkekara

PRODUCTION EXPERT | INDUSTRIAL ENGINEER



Professional Summary

Detail-oriented Mechanical Engineer with multidisciplinary skillsets intersecting technical and management verticals.

Supported elite Indian Space Programme as a Graduate Engineer picked-out from top 1% engineering graduates of the country.

Professional Experience

Production and Logistics Intern at Proglove | Germany

Sep 2016 – Feb 2017

- Optimized assembly processes for IOT hardware (MARK Basic) using design thinking and lean methods by performing bottleneck analysis and line balancing resulting in an overall improvement in assembly time by 33%.
- Assisted in standardization of BOM and component sourcing for prototype batch up until series production achieving a decrease in overall production and assembly time.
- Assisted in the development of a smart wearable production line using rapid prototyping and innovative production methods
- Visualized sales and production matrices to forecast future sales volume which resulted in a reduction in FGI stock by 35%.

Production Consultant at Chass Engineering | India

Jun 2014 – Nov 2015

- Spearheaded digitalization of engineering design team by introducing concurrent engineering and applying project management principles resulting in a reduction of overall project lead times by 24%.
- Achieved a 20% reduction in product cost by utilizing design for manufacturing (DFM) and assembly (DFA) principles.
- Introduced platform strategy by sorting existing product lines into families achieving 45% quicker change over time.

Graduate Engineer Program - Production at Indian Space Research Organization | India

Jun 2013 – Jun 2014

- Resolved complex manufacturing problems from initial design until product introduction for various launch vehicle builds, mars mission and the human space program.
- Facilitated data collection and requirement definition for an International bid to procure equipment costing EUR 100k.

Projects

1. Master Thesis - Autonomous assembly In Production Systems (Institut für Fertigungstechnik)

- Enable Industrial robotic systems to reason and build assemblies autonomously from product data, CAD data and BOM.

2. Lead Factory - TU Graz scooter project

- Performed functional mapping and value analysis of TU Graz scooter resulting in the reduction of overall part number by 27%.

3. Gründungsgarage - AI powered mouse

- Led product design and prototyping of AI-powered mouse using Autodesk Inventor and 3D printing technology.

4. Maker Space Graz - Smart Locker System

- Headed development and testing of mechanical systems of the smart locker including the realization of prototypes.

Skills

1. Technical Skills

- Autodesk Inventor
- AutoCAD
- Value Management
- Lean Manufacturing



2. Business Skills

- Business Process Modelling
- MS Office
- Persentation and Design
- Project Management



3. Miscellaneous Skills

- Design Thinking



Education

Technical University Graz, Austria

2015-2021

Master's in Production Science and Management

Nanyang Technological University, Singapore

2018

Master's in Mechanical Engineering (Exchange semester)

Sathyabama University, India

2008-2012

Bachelor's in Mechanical and Production Engineering

Hackathons

Makerthon, Graz (2021) – Rotor Design of the Future (Winner)

Hackbay, Nürnberg (2021) – Track challenge (Winner)

ER&D, Munich (2019) – AR Navigation (2nd Place)

Makerthon, Graz (2018) – Magna Urban Mobility (Winner)

Projects

• English CEFR Level C2

• German A2 (persuing B1)

• Malayalam Mother tongue

Hobbies

Dragonboating

Vintage bike restoration

Journaling

Cooking