**Resume - Mahan Mashoof**

Email: [mahan.mashoof@gmail.com](mailto:mahan.mashoof@gmail.com)

Tel: +46 766 920 960

Portfolio: <https://mahan.netlify.app/>

**Mechanical Engineer**

SUMMARY

Passion for innovation and demonstrated advanced problem-solving skills within business- and product development. More than 14 years of experience from Mechanical Engineering and Project/Business management in areas such as Aerospace, IT and Life science.

ACCOMPLISHMENTS

**Product development**,design and concept creation within various areas and projects, applying different production techniques and materials, resulting in better products, systems, and cost & size reductions.

**Customer support and training** for SolidWorks design automation tools as a consultant cooperating with various European enterprises.

**Project management**, Project development, Budgeting, Capital raising, Web development, and Business development for start-ups in Food-tech and Sports car manufacturing.

**Voluntary Online English Teacher** including lesson planning and weekly homework preparations for children in various ages through Edumais and the Rio-based school Solar Meninos de Luz.

WORK EXPERIENCE (last 10 years)

**Innovative Engineering Group**

USA July 2019 -

**Senior Mechanical engineering freelancer**

Performing concept development of recycling station for vehicle tires. Pneumatic unit, adaptable for a range of tire dimensions, and first module of a future line.

* Unit design and development
* System architecture

**Daitya Automotive**

India May 2020 – Sep 2020

**Team manager and Project management**

Mechanics department manager and remote project management for 16 engineers worldwide at automotive start-up Daitya, with mission to develop first Indian super sports car, Rudra-HC. Flexible leadership position with a mix of management and hands-on technology.

* Project scope and milestone definitions
* Progress measurement and decision making
* Daily scrum and technical development feedback

**Bosch Rexroth**

Sweden Sep 2018 - May 2019

**Senior Mechanical engineering consultant**

Custom-ordered Hydraulic cylinders used in manufacturing-, food- and mining industries, designed for in-house production

* Applied hydraulic sealing solutions for custom product configurations
* Profound understanding of standards (DIN, ISO), GD&T and machined steel surface finishing
* Versioning in SAP and Windchill PDMLink

**Orgentec Diagnostika**

Sweden Jan 2016 - May 2017

**Senior Mechanical engineering consultant**

Product development and module responsible for redesign of an automatic Serology diagnostics device, in cross-functional collaboration with HW and SW.

* Established device liquid flow chart and developed unit for system liquid dispensing, operating with microliter accuracy
* Created of new cartridge loading unit, increasing test loading capacity by a factor of 30
* Designed parts for plastic injection molding, sheets metal, machining and rapid prototyping
* Performed Finite Element Analysis and assisted PM with design coordination

**GE Healthcare**

Sweden Jun 2013 - Dec 2015

**Senior Mechanical engineering consultant**

Development of a new Side cabinet including Power unit, Cooling unit and Radio Frequency Unit for GE new GENtrace Cyclotron.

* Created a more compact and serviceable water-cooling unit with GE Advanced engineering crew
* Designed a more cost-effective Radio frequency unit with GE Electric team resulting in enhanced EMC leakage characteristics, including advanced welding in aluminium and air cooling CFD
* Developed and assembled new cyclotron side cabinet, reduced in cost and size, due to clever solutions, new materials and negotiations with supplier contacts from previous assignments
* Contributed with new solutions for cabinet-cyclotron cabling and cabinet flexible positioning

**Swedish Space Corporation**

Sweden Jun 2011 - Apr 2013

**Senior Mechanical engineering consultant**

Rocket launch campaign of micro-gravity test (X-ray imaging of metal-alloy crystallization), ordered by the European Space Agency, followed by a re-design of same experiment unit for Zero-G parabolic tests.

* Reviewed, tested, performed documentations and troubleshooting for launch preparation
* Contributed to assembly and dimensional analysis of the rocket according to requirements
* Redesigned and assembled the same X-ray shielded unit for zero-G flight installation according to ESA safety directives
* Contributed with cooling-liquid pressure drop calculations for micro-gravity experiment rocket unit
* Performed much hands-on assembly, Mechanical design & FEA, and workshop preparations

**ADB Safegate**

Finland, Sweden Aug 2011 - Sep 2012

**Mechanical engineering consultant**

Improvement of airport Runway light housing (IDM2051) system and user manual

* Designed new facet-reflector prototype in cooperation with University of Helsinki
* Enhanced light housing heat shielding and redesigned PCB
* Updated product manual

**Tacton Systems**

France, Italy, Sweden Oct 2007 - Nov 2010

**Configuration specialist SolidWorks**

Application and training of Design automation CPQ TactonWorks (parameter-based configurator)

* Provider of TactonWorks solutions in various projects, collaborating with multinational stakeholders
* Staff training, Product support and Customer service in various European countries including guidance and tutorial documentations

SKILLS

**PROFESSIONAL SKILLS**

Product development

Customer support

Business development

Technical sales support

Project management

Staff training

Functional specifications

Portfolio management basics

Data Analysis basics

**SOFTWARE**

Creo

SolidWorks

Autodesk Inventor

NX

Autocad

PDM

Ansys

Office package

MS Project

SAP

Jupyter Notebook (Python)

Blender

**ENGINEERING SKILLS**

FEA - FEM - CFD

DFA - DFM

Sheet metal design

Plastic injection molding

FMEA

Rapid prototyping

GD&T

Vacuum system design

**SOFT SKILLS**

Leadership

Team work

Communication

Problem solving

**WEB DEVELOPMENT**

Ruby on rails

HTML

CSS

JavaScript

Bootstrap

Git

SQL

React JS

Node JS

Express JS

**LANGUAGES**

English

Swedish

Persian

Portuguese

Norwegian

German

EDUCATION

**KTH Royal institute of Technology**

Sweden

Sep 1999 - Nov 2004

**Master of Science Vehicle Engineering**

Graduate courses in mechanical engineering

Master Thesis in Industrial Coffee Machine production and assembly methods (Coffee Queen)

COURSES

**Data science professional certificate, IBM** May 2019 - ongoing

**Investment and portfolio management, Rice University** May 2019 – Sep 2019

**EDGE Level 1 (oil and gas), Norwell Edge** May 2019 – Aug 2019

**Design process:** Detailed drilling programs, Material procurement, Offset review and conceptual design, Time and cost estimation

**Introduction:** Drilling, Geology, Production

**Operations execution:** Drilling and rig equipment, Drilling operations, Dynamically positioned rigs, Jack-up rigs, Land rigs, Management of change, Moored rigs, Well testing an completion

**Operations planning:** Drilling procedures, Emergency planning and safety, Project logistics, Risk management, Waste management, Waste control equipment, Well control procedures, Well examination and verification

**Special applications:** HPHT, Deepwater

**Technical design:** Abandonment and barriers, Casing and tubing design, Casing seat selection, Cement design, Completion design, Conductor and riser analysis, Directional drilling and wellbore positioning, Drilling fluids, Drillstring design, Formation fluids, Formation temperature analysis, Fracture gradient, Hydrostatics, Materials selection, Pore pressure, Shallow gas, Well test planning, Well head and xmas tree selection

**Project closeout**

**Well integrity management**

**Digital Transformation, University of Virginia & Boston Consulting Group** May 2019

**Offshore oil and gas introduction, Satoms** May 2019

**Sealing solutions E-learning program, Trelleborg** Apr 2019

**ISO 13485-2016 Employee training** Sep 2018

**The Fundamentals of Digital marketing, Google** Feb 2018

MISCELLANEOUS

Employee of the month awards | Basketball club president 2004-2016 | Top designer at [Cadcrowd](https://www.cadcrowd.com/profile/19908-mahan)