

# ABDEL KADER ZRAYKA MECHANICAL DESIGN

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**Phone:** +39-3273492343 **Date of Birth:** 14-03-1989 Nationality: Lebanese - Italian **Link:** linkedin.com/in/Abdel kader-

Zrayka/

#### PROFESSIONAL SUMMARY

Mechanical Engineer with 9 years of experience in design of automatic lines for the food packaging sector and plastic pipe processing, as a mechanical design. Areas of expertise include:

- Belling machine, haul-offs, saws, packaging
- Food packaging
- Design to cost and improvement product
- Standardization of product and materials

- R&D Engineer
- Feasibility analysis
- Autonomous & Team Player
- Verbal/Written Communication

### PROFESSIONAL EXPERIENCE

### PROJECT & MECHANICAL DESIGN ENGINEER

2021 - 2022

COMAV SRL DOSSO

- Mechanical design in bulk handling machine (loading and unloading Big-Bag machine, valves for pneumatic transport, emptying bags machine...,etc) .
- Product development and feasibility of machine.

#### **MECHANICAL DESIGN**

2019 - 2021

SICA ALFONSINE

- Mechanical design of automatic machine for plastic pipes processing.
- Design and development of a novel bending tube machine.
- Product development and feasibility of machine

## **MECHANICAL DESIGN**

2014 - 2019

CT PACK

- Mechanical design on the various machines bakery, chocolate, ice cream and frozen food.
- Design and development a new version of delta Robot.
- Ability to design from a blank sheet or starting from an existing machine.
- Research and development groups of machines (frame, Robots, grippers, belts, etc.)

## Visiting Researcher

2017

CIRI MAM BOLOGNA — bologna, Italy

Optimize the frame and Delta Robot by means of Elasto-kinematics analysis.

#### EDUCATION

# Doctor of Philosophy in Engineering Science

2015 - 2018

Field of study: mechanical vibration.

Thesis title: On the modal parameter estimation methods critical review, implementation in Matlab environment and effectiveness.

# Master of Science in Mechanical Engineering 110/110

2011 - 2014

University of Ferrara — Ferrara, Italy

## Bachelor of Science in Mechanical Engineering 90/110

2008 - 2011

University of Ferrara — Ferrara, Italy

#### SKILLS

- Proficient in Autodesk 3D inventor CAD, Autocad, PTC creo modeling, Matlab, SAM and Microsoft office package.
- Good knowledge of SolidWorks, MSC Patran and Ansys.
- Finite element method.
- Experimental and operation modal analysis.
- Good communication skills.
- Ability to work individually and as a member in a team.
- Flexibility and ability to work in a multicultural environment.
- 3D printer.
- Design mold for sand and shell casting.
- Milling and turning.

## **LANGUAGES**

Arabic: Mother tongue Italian: C1 English: B2 French: A2

## HONORS & AWARDS

- Full three-years scholarship offered by the Italian Ministry for Ph.D. programs
- Full five-years scholarship offered by ERGO for Bachelor's and Master's Degrees

### **PUBLICATIONS**

- Zrayka, A.K. & Mucchi, "A comparison among modal analysis parameter extraction methods." E. SN Appl. Sci. (2019) 1: 781. https://doi.org/10.1007/s42452- 019-0806-8

## OTHER INFORMATION

- Availability to travel in Italy and abroad.
- Personal car owner.