**Curriculum Vitae**

**Last Name:** BEN YAHIA

**First Name:** Wafa

**Birth Date and place:** 15 - 09 - 1985 in Sfax Tunisia

**Nationality:** Tunisian

**Family Situation:** Married

**Address:** Mharza road 3km, Mesk 2 building, 4th floor Ap4, 3052 Sfax-Tunisia.

**Position:** PhD student

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| **TRAINING AND DEGREES** | | | |
| **2012-2014** | | | Ph.D. in Mechanical Engineering in the National Engineering School of Sfax (ENIS), with the research laboratory of mechanics, modelling and manufacturing (LA2MP).  Subject: Multi-objective optimization for collaborative Supply Chain planning |
| **2009-2011** | | | Master degree in Mechanical and Engineering – ENIS (National engineering school of Sfax) |
| **2006-2009** | | | Engineer degree of mechatronics – ENISo (National engineering school of Sousse) |
| **2004-2006** | | | First cycle graduation in Mathematics and Physics – IPEIS (Preparatory Institute for Engineering Studies in Sfax) |
| **2004** | | | High school degree - Mathematics |
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| **PROFESSIONAL EXPERIENCE AND TRAINING**  **From 15/09/2011 to 15/06/2012:** research internship in Laboratory for Production Management and Process (LGPP) of the federal polytechnic school of Lausanne (EPFL), Switzerland. | | | |
| **February-June 2009:** Internship of graduation project done in cooperation between ENIS and ENISo: command of mobile manipulator  **July 2008:** Engineering internship at this company AMS (Mechanical Workshop of the Sahel): Design of a reel for feeding a steel press  **July 2007:** Initiation into the business with the company « Thyna Petrollum Services » in Sfax. | | | |
| **POJECTS** | | | |
| **2009-2011** | | * Mater project: Multi-objective optimization for cooperative planning: development of a multi-objective optimization model for a cooperative planning between different plants which belong to the same supply chain. A genetic algorithm NSGA-II developed in C language was used. | |
| **2006-2007** | * Semester project 1: realization of a database of personnel management of a company (Microsoft Access) * Semester project 2: realization of an electronic board of a demodulator of amplitude. (use of Software ISIS 7.0 for the design) * Project of module: Initiation with the CAO (SolidWorks), subject is system of stretcher bed * Project with microcontroller PIC 16F84A | | |
| **2007-2008** | * Realization of an electrical cupboard for the command of a conveyor integrating the industrial automat Siemens S7 CPU 200 * Semester project 3: Fluid Mechanics “Improvement of a mini-code for visualization and simulation of steady flows of perfect fluids in the presence of obstacles (Software: JAVA)” * Semester project 4: designing a device for supplying a hydraulic press (AMS) * Volumetric Machine: “Command of a vertical press, with preservation of the clamping force by an accumulator” (Software: Automation Studio V5.0) | | |
| **2008-2009** | * Robotics: “Geometric, kinematics and dynamics modelling of a serial robot IRB 6600-225” (Software: Matlab) * Semester project 5: designing of a machine of inspection of fabrics * Finite Element Method: “learning and digital simulation of an actuator MEMS (micro-pump with membrane) using the finite element code ABACUS V6.5 | | |
| **IT Skills** | | | | |
| * **Mechanical Design:** SolidWorks, Catia V5, MecaPlan, ABACUS, OpenMeca * **Electronic Design:** ISIS, Eagle, ModelSim, MPLAB IDE * **Automatic Design:** STEP7 Microwin, Automation Studio * **Simulation tool:** ARENA, Prelude * **Programming languages:** MATLAB, JAVA, C, C++, PIC C Compiler, CC5X, Maple,ModelSim, Lindo * **Office:** Microsoft Project, Microsoft Access, Microsoft Office, | | | | |

**RESEARCH WORK**

W. BEN YAHIA, N. CHEIKHROUHOU, F. MASMOUDI, O. AYADI

« A multi-objective Optimization for Multi-period Planning in Multi-item Cooperative Manufacturing Supply Chain », Proceedings of the 5th international congress Design and Modelling of Mechanical Systems (CMSM), March 2013, Djerba, Tunisia.

Published in « Design and Modelling of Mechanical System »; page: 635-643

**Conference paper**

W. Ben Yahia, H. FELFEL, O. AYADI, F. MASMOUDI,” Comparative study for a multi-objective MLCSP problem solved using NSGA-II & ɛ-constraint”. Mechatronic systems days, JSM 2014, 17-19 Mars 2014, Mahdia, Tunisia.

**Teaching experience**

2013-2014: Teacher assistant (90 hours) at the National Engineering School of Sousse (ENISo)

- 2nd year of Training Engineer Electromechanical Engineering

- 36 hours: TP production management with the SIMAN simulation software ARENA 10.0

- 18 hours: TP operational research with the linear programming software Lindo 6.1

- 36 hours: TP production management with the Prelude 7 ERP software.

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| **LANGUAGES** | | | |
| **Arabic** | **French** | **English** | **German** |
| Mother tongue | Bilingual | Good knowledge (B2) | Basic knowledge |
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| **OTHER ACTIVITIES** | | | | |
| * Participation in personal development workshop * Sports: Basketball, swimming, gymnastic * Reading, listening to music, traveling | | | | |