Curriculum Vitae

Personnel Detail

> Name and surname: Moulahcene Fateh.

➤ Date and place of birth: 17/04/1982 to Hidoussa, Batna

Nationality: AlgerianFamily status: Married

➤ Address: 05300 Boulevard South Merouana, Batna – Algeria

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Research Interests

My research interests are: Programmable Circuits (CPLD,FPGA), VLSI design (Schematic, Simulation, Layout (DRC, LVS, PEX testing, post simulation, Fabrication, Chip), Programming Language C, C++, Electronics; Low-power Low voltage circuits and systems, signal processing, analog, digital and Mixed signal integrated circuits, reconfigurable and embedded architectures, biomedical systems, Monte Carlo analysis.

Education

➤ **Ph.D**. in Microelectronic, University of Batna, Algeria, 2015

Thesis: Contribution to the design of CMOS circuits for medical application

Advisor: Professor BOUGUECHAL Nour-Eddine

➤ Magister. in Microelectronic, Specialty Integrated Circuit Design and Programmable circuits, University of Batna, Algeria, 2008

Thesis: Design of a digital to analog converter in CMOS 0.35um technology

Advisor: Professor BOUGUECHAL Nour-Eddine

Engineer. in Electronic, Specialty industrial control, University of Batna, Algeria, 2005

Thesis: Design and realization of mobile Robot based on Microcontroller.

Teaching Experience

- ➤ Sep 2009 –Jan 2012: Temporary Teacher for Undergraduate Student, University of Batna, Algeria
 - 1. Computer and Programming Module: Langage Pascal, langage C
- ➤ Fev 2012 until now (2012-2015): Assistant Teacher for Graduate Student, University of ibn khaldoun Tiaret, Algeria
 - 1. Microsystem and Programmable Circuit Module:

Microsystem

Microprocessor (8086) + langage Assembler

Microcontroller (PIC16F877A and 18F) + Langage C

FPGA+ABEL+VHDL

2. Real-time system Module:

Tache, Processus, Scheduling, file synchronization between processus

3. Atelier OS and advanced programming Module:

Initiation Linux environment

C Programming in Linux environment

- 4. Physic of semiconductor
- 5. Opto-electronic Dispositifs

Computer Skills

OPERATING PLATFORMS: GNU/Linux (RHEL, OpenSUSE, Mandriva), MS Windows.

PROGRAMMING: C/C++, Assembler, ABEL, VHDL, Verilog, VHDL-AMS.

HARDWARE DESIGN: Xilinx - Virtex FPGA, Microchip - Microcontroller PIC16F and PIC 18F,

Microprocessor, Arduino - Arduino Uno.

SOFTWARE SIMULATION: Cadence - Virtuoso, Spectre, Assura, Xilinx-ISE, Altera-Quartus

II, MATLAB, LabVIEW, MPLAB, MICROC, PICC, ORCAD.

Writing and Database: LATEX, Microsoft Office.

Traineeship

20/07/2007 to 20/10/2007: TU Berlin: Technische Universität Berlin, Germany

Position held: Design and layout of analog, mixed-signal integrated circuits

Achievements: Simulation and layout in Cadence Virtuoso Software for the Design analog mixed

integrated Circuits.

I participated in the design of an integrated circuit in the medical field:

"General Electric Medical Ultrasonic SAP low voltage Chip"

Publications

Journal Articles

- 1- <u>Fateh Moulahcene</u>, Nour-Eddine Bouguechal, Imad Benacer and Saleh Hanfoug 'Design of CMOS Two stage operational amplifier for ECG monitoring systems using 90nm technology', International Journal of Bio-Science and Bio-Technology, Vol.6, No.5, pp.55-66, 2014
- 2- <u>Fateh Moulahcene</u>, Nour-Eddine Bouguecha1, Youcef Belhadji 'A Low Power Low Noise Chopper-Stabilized Tow-stage Operational Amplifier for Portable Bio-potential Acquisition Systems Using 90 nm Technology', International Journal of Hybrid Information Technology, Vol. 7, No. 6, pp. 25-42,2014
- **3-** Y. Belhadji, B. Bouazza, <u>Fateh. Moulahcene</u>, N. Massoum 'Ensemble Monte Carlo analysis of subpicosecond transient electron transport in cubic and hexagonal silicon carbide for high power SiC-MESFET devices' IJMPB, International Journal of Modern Physics B, vol. 34, pp. 1893–1903,7 May.2015
- 4- Salah Hanfoug, <u>Fatch moulahcene</u>, <u>Nour-Eddine Bouguechal</u> "Contribution to the Modeling and Simulation of Current Mode Pipeline ADC Based On Matlab", <u>International Journal of Hybrid Information Technology</u>, <u>Vol.8</u>, <u>No.3</u>, pp. 2015

Conference Proceedings

1- <u>Fatch Moulahcene</u>, Nour-Eddine Bouguechal, Saleh Hanfoug ''A New Ultra Low Voltage high CMRR Instrumentation Amplification in Biomedical Application'' 2nd International Conference On Electronics CISE'09, Oct, 25-26, 2009, Batna, Algeria.

LIST OF FINAL YEAR GRADUATE PROJECT SUPERVISION

- **Theme 1:** "Study and realization of a three phase controlled rectifier based on a microcontroller".
- **Theme 2:** "Designing a low-voltage digital to analogue converter in 90nm CMOS Technology"
- **Theme 3:** "Designing a low-voltage operational amplifier in 90nm CMOS Technology"
- **Theme 4:** "Study and realization of mobile robot based on microcontroller"
- **Theme 5:** "study and realization of an acquisition card for physiological signals"

Languages

English and French (Fluent) – Arabic (Native)