Osman Saleh

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WORK EXPERIENCE

UAE University **March 2021 – Sept. 2021**
Research Associate Abu Dhabi, UAE

- Performed full custom analog layout, physical verification, parasitic extraction and tape out of low noise electronic amplifiers for biomedical applications using Cadence Virtuoso
- Experience with .35um Austrian Microsystems Process Design Kit
- Design verification by comprehensive circuit simulations, including Monte Carlo methods.
- Architecture-level and block-level design (pre and post layout) of amplifiers
- Experienced with SR770 - FFT Spectrum Analyzer

Baker Hughes **June 2019 – Aug. 2019**
AMO Electronics Engineering Intern Dubai, U.A.E

- Product-line electronic assembly and disassembly
- Calibration and validation of wire-line instruments and equipment. (Oscilloscopes, AC/DC Power supplies, Torque machines, etc.)
- Well log analysis for reservoir characterization (gamma ray, resistivity & density logs)
- Received Lean Six Sigma training. Gained ability of applying the principles to improve efficiency and quality in a manufacturing or business setting

Publications and Projects

- **High Dynamic Range Photocurrent Sensory Circuit with a Multi-Transistors Background Light Cancelation Loop for Photoplethysmography Sensing** **November 2021**
  Published In MDPI Electronics Journal - https://www.mdpi.com/2079-9292/10/22/2769
  - Photocurrent sensor-based blood pressure measuring device
  - Novel transimpedance amplifier topology for PPG Systems.
- **Piezoelectric Power generation in Electric Vehicles**
  - Piezoelectric power generation in EVs to power small electronic devices
  - PCB design using DipTrace and PCB fabrication
  - Ceramic Piezoelectric PZT-5H design and modelling using COSMOL Multiphysics 5.4

EDUCATION

MSc. In Electrical and Electronics Engineering **September 2021 – November 2022**
Coventry University

- Distinction. First Class honours (2:1). FPGA-Based Digital System Design, Power Electronics and Drives, Advanced Control Engineering, Digital Signal Processing
- CAPSTONE Project: Low power, energy efficient transceiver for IoT Applications.
  - Full layout of energy efficient amplifiers on Cadence Virtuoso
  - Optimization for parasitics for less power consumption
  - MATLAB simulation of the transceiver and channel, including digital electronics

BSc. In Electrical and Electronics Engineering **July 2020**
University of Sharjah

- Highest Honors, GPA 3.92. Received 10 Year Golden Visa
- IEEE UOS Organizing Committee Member. Organized and facilitated university student activities and events.

SKILLS & INTERESTS

- **Skills:** Cadence Virtuoso, Mixed signal IC design, Circuit design, Calibre LVS/DRC, PCB design and fabrication, Altera, MATLAB, C, C++, VHDL, Very skilled in Python, Linux, PSPICE, Arduino, Linux CentOS
- **Interests:** Programming; Manchester United; Traveling