# Ibrahim Nazir Sangi

Email: <u>ibrahimsangi91@gmail.com</u>

LinkedIn: https://www.linkedin.com/in/ibrahimsangi/

Website: http://www.ibrahimsangi.com

#### PROFESSIONAL EXPERIENCE

#### GRADUATE ASSISTANT, EASTERN ILLINOIS UNIVERSITY, CHARLESTON, IL (AUG 2017 – PRESENT)

- Remodeling and maintaining Automation and Control Laboratory
- Training and instructing students to complete their Laboratory work
- Designed and build a working model of a robot for ATMAE 2017 Robotics Competition at Cincinnati, OH

## GRADUATE ASSISTANT, EASTERN ILLINOIS UNIVERSITY, CHARLESTON, IL (JAN 2017 - MAY 2017)

- Evaluated the methods to maximize the involvement of elder and disabled people in smart home products
- Evaluating smart grid products, based on customer requirements and psychology to ensure greater use of technology
- Maintaining CENCERE (Center for Clean Energy Research and Education) facility

#### DESIGN ENGINEER, AND-OR LOGIC PVT LDT, ISLAMABAD, PAKISTAN (JUNE 2012 – AUGUST 2016)

- Designed, developed and implemented High-Speed multi-layer PCB design (motherboard for NVidia TEGRA X1 SOC)
- Designed, Power systems and developed firmware for inverters, battery chargers, MPPT charge controllers
- Developed firmware for both low and high-level libraries/APIs for micro-controllers including ARM, PIC, C51
- Successfully accomplished production of units as Junior quality assurance officer
- Enhanced PCB designing process by introducing 3D modeling approach (This significantly reduced projects timeline by up to three months)
- Rapid prototyping to evaluate project time, concept, resources, and requirements
- A leading engineer in designing compact, high density, and energy-efficient products
- Ensured efficiency and quality of work
- Hands-on experience with soldering any device (including through hole and surface mount devices)
- An expert in bringing-up and debugging boards/systems
- BOM generation/optimization and purchasing of components from different vendors worldwide
- Supervised/trained sub-engineers and technicians
- Recruited engineers through technical interviews

## **SKILLS & ABILITIES**

- Embedded Systems Design
- Programming Assembly/C/C++
- Circuit Designing and Analysis
- Power Electronics design
- Digital Signal Processing
- Product Design and Development
- Schematic and PCB Designer
- Production and Troubleshooting Skills
- Hardware and Software debugging
- Surface mount and through-hole devices soldering

- Mechanical Concepts
- Strong Team player, Teamwork
- Independent and Self-Motivated
- Time and energy management
- Multitasking
- Flexible and adaptable
- Vision and challenge oriented
- Believe in quality and continual improvement
- Leadership and pressure handling skills
- Bringing up boards

## **TOOLS**

- Altium Designer, Proteus
- Keil µVision, MPLAB, MATLAB
- IAR Embedded workbench

- Oscilloscope, Logic Analyzers, Power Supplies, Soldering Iron, DMM
- Microsoft Office, Visual Studio & Visio
- Cadence PCB editor, Capture

## **EDUCATION**

## MS-COMPUTER TECHNOLOGY, EASTERN ILLINOIS UNIVERSITY, CHARLESTON, IL (AUG 2016 – PRESENT) CGPA: 3.89/4.00

- An active member of Research Mentorship Meeting (RMM) held every week
- An active member of robotics design team (Also took part in multiple competitions i.e. ATMAE robotics competition)

BS-ELECTRONICS, COMSATS INSTITUTE OF INFORMATION TECHNOLOGY, ISLAMABAD, PAKISTAN (AUG 2008 – JUNE 2012) CGPA: 3.31/4.00 (81.06%). WON 3<sup>RD</sup> POSITION (BRONZE MEDAL)

• Designed Quad Copter as a final year Project

#### HOBBIES AND INTERESTS

- Reading books, helping people, socializing.
- Playing cricket, badminton, football, and computer games etc.
- Designing and developing interesting circuits to benefit home and society. I also have a blog named. http://www.ibrahimlabs.com