Saif Khan

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KEY SKILLS

- Experience programming in Python using Jupyter and Pycharm.
- Experience in Embedded programming using C/C++ using Eclipse IDE and Code Composer Studio.
- Experience in creating scripts for mathematical programming in MATLAB.
- Experience in Embedded programming microcontrollers using C in AVR architecture.
- Experience in Circuit design and Simulation using Multisim, LT-Spice and TINA-TI.
- Designing Printed Circuit Boards (PCB) using Altium Designer and Express PCB.
- Experience creating and programming applications using MATLAB App Designer.
- Proficient in Microsoft Office Suite.

EDUCATION

Graduate: Rice University (Masters in Electrical and Computer Engineering) – Expected: May 2024

Undergraduate: Milwaukee School of Engineering (Bachelor of Science in Electrical Engineering) – May 2019 – GPA: 3.38

PROFESSIONAL EXPERIENCE & PROJECTS

- **Machine Learning Project (Rice University) (Expected: DEC 2022)**:
  - Designing a text recognition model that runs on an STM32F746 ARM microcontroller.
  - Designing the model using TensorFlow lite to recognize and distinguish text words.
- **Electronics Test Engineer (PhotoSound Technologies) (OCT 2019 – OCT 2020):**
  - Programmed an App using MATLAB App Designer to control primary functions of an OPO Laser and also assisted in programming of an App to control primary functions of a Filter Wheel.
  - Programmed a microcontroller to multiplex between four states and allow the user to set the state execution order in an array.
  - Improved documentation such as updating user manuals of hardware medical devices, updated manuals of medical device software, wrote test plan and tested first commercially sold medical device, wrote test plan and tested new software revision, wrote programming manual to operate software with hardware using MATLAB only.
  - Performed Electrical work such as attaching wires, arranging wires, and soldering SMD components in electrical compartments of medical device.
- **Intern (Plexus) (Co-op) (SEPT 2017 – FEB 2018):**
  - Performed and wrote worst case analysis document on a power on reset circuit.
  - Designed PCB for a microcontroller-controlled temperature sensor and also Improved an existing PCB design using Altium designer by integrating existing design with multiple sensors.
  - Designed and built prototypes of an LC tank filter for a medical device and performed requirement specification and verification testing of the prototypes.
  - Assembled mechanical as a mechanical assembler using a variety of tools and equipment according to required specifications in a specific area of a production line in a manufacturing organization.
- **Data Entry Clerk (Transcore) (Part-Time) (OCT 2021 – MAY 2022)**
  - Review images and enter image data into a central database.

ADDITIONAL INFORMATION

- U.S Citizen
- Languages: English, Urdu