

JEPHTA MADZIVA

MECHATRONIC ENGINEER | ELECTRONIC ENGINEER | EMBEDDED SYSTEMS DESIGNER

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SUMMARY

Trustworthy Mechatronic Engineer with 3 years of practical experience and dedicated work ethic. Excellent in PCB designing, (Embedded) C Firmware development, electronics designing and 3D CAD design. Self-motivated to consistently provide first-class results in line with stringent targets and deadlines.

EXPERIENCE

2024 - Present Freelancing

- Manufacture grade PCB design.
- Component selection & cost selection.
- Project consultation & management.

2023 Freelancing Electronic Engineer

- Designed a 12, 9 & 6v DC power supply PCB.
- Designed a HC05 Bluetooth & ESP-07 WIFI shield for an Arduino Mega board.
- Reverse engineered a component diagram into a complete project.

2022 Remote Mechatronic Consultant

- Designed a Flight Simulator Station and firmware in C for Arduino Uno and Mega .

2021 Internship Assistant Technician

- Assisted in lab monitoring during practicals.
- Invigilated and marked student test/exams & practicals.
- Assembling & maintaining workstations.

SKILLS

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|----------------------------------|--------------------------------|
| ✓ PCB Layout | ✓ Critical thinking |
| ✓ Excellent Communication skills | ✓ 3D CAD design |
| ✓ Electronic design | ✓ Documentation skills |
| ✓ Strong work ethic | ✓ UART, I2C, SPI Communication |
| ✓ Test design | ✓ Handling pressure |
| ✓ Time Management | ✓ Problem solving |
| ✓ C Firmware | ✓ Attention to detail |

QUALITIES

Multi-disciplinary skills across multiple stages of manufacturing an embedded system from schematic designing, embedded C programming, single & multi-layer PCB designing and computer-aided designing & manufacturing.

Always eager to learn, test my limits and tackle new challenges to get things done. I can work well under pressure with commendable teamwork, critical thinking and problem solving skills

EDUCATION

Diploma, Mechatronics, Cape Peninsula University of Technology (CPUT), Cape Town, WC | 2017 - 2023.

Advanced Diploma , Basic Electronics, Alison.com | 2023.

MICROCONTROLLERS

PIC | ARDUINO | ATMEL | ATMEGA | STM32 | ESP32 | ESP .

PROFICIENCIES

MPLABX IDE | PROTEUS SIMULATOR | Arduino IDE | MIT App Inventor | Mastercam | Vetric Aspire | GIMP | Visual Studio Code | Solidworks | Autodesk Fusion 360 | Easy EDA | Fritzing | Microsoft Office | Zoom | FreeCAD