**About the Internship**

**Micropolis Robotics**is seeking for highly motivated **Electronics Design** **Intern** to work in domain of Robotics. As part of the team candidate will work closely with Electronics and Embedded software engineers to streamline the testing and drive process reliability with safety standards.

**Internship Responsibilities:**

* Design of Electronic schematics and inspection of PCB.
* PCB design and assembly (preferred with Altium).
* To write and upload Firmware of the embedded systems for testing of the hardware (power supplies, motor driving …).
* Identifying and reporting hardware issues and solving technical problems.
* Validating designs according to Automotive standards.

**Should HAVES:**

* Student in Electronics /Electrical Engineering or equivalent.
* Hands-on Experience in C, C++…
* Deep knowledge of wiring schematics, various electronic components, and PCB design tools.
* Hands-on experience in electro-mechanical systems.
* Experience in assembling and replacing SMD components.
* Set up and use test equipment like oscilloscopes, signal generators, spectrum analyzer, logic analyzer, and EMC tester.
* Effective communicator and excellent attention to detail.

**About the Internship**

**Micropolis Robotics**is seeking for highly motivated **Electronics Design Intern (eCAD**) to work in domain of Robotics. As part of the team candidate will work closely with Electronics and Embedded software engineers to streamline the testing and drive process reliability with safety standards.

**Internship Responsibilities:**

* Develop Electrical Schematic capture using ECAD tools.
* Develop schematic symbols and PCB footprints (component library).
* Design and verification of multilayers PCBs.
* PCB Layout component placement following Design Standards.
* Design and create STP models for the electronic components such as ICs, Discrete components,
* SBC’s, etc., and maintain the component library.
* Development of component libraries for electronic components.
* Support prototype builds by creating assembly instructions and production launch.

**Should HAVES:**

* Student in Electronics /Electrical Engineering or equivalent.
* Two to three years of experience as Electronics design Engineer.
* Hands-on Experience in C, C++…
* Deep knowledge of wiring schematics, various electronic components, and PCB design tools.
* Hands-on experience in electro-mechanical systems.
* Experience in assembling and replacing SMD components.
* Set up and use test equipment like oscilloscopes, signal generators, spectrum analyzer, logic analyzer, and EMC tester.
* Effective communicator and excellent attention to detail.

**About the Internship**

**Micropolis Robotics**is seeking for highly motivated **Power Electronics Intern** to work in domain of Robotics. As part of the team candidate will work closely with power Electronics and Embedded software engineers to streamline the testing and drive process reliability with safety standards.

**Internship Responsibilities:**

* Responsible for design, development, analysis, and testing of inverters eDrive applications.
* Development and modelling concepts for the design of electronic circuits for robots drives.
* Responsible for the implementation of electrical and electromagnetic simulations.
* PCB Layout component placement following Design Standards.
* Perform design of the power module to requirements.
* Familiar with power electronics topology for AC/DC and DC/DC conversion for EV and ESS.
* Development of component libraries for electronic components.
* Support prototype builds by creating assembly instructions and production launch.

**Should HAVES:**

* Student in Electronics /Electrical Engineering or equivalent.
* Understanding of analog circuitry, power electronic drives in the 300W to 500W level at high frequencies
* Knowledge about Buck, Boost, Transformer drive and RF Class D & E Amplifiers topologies
* Experience designing and fabricating advanced power electronic modules and converter packaging
* Knowledge about power electronics topology for AC/DC and DC/DC conversion for EV and ESS.
* Hands-on Experience in C, C++…
* Deep knowledge of wiring schematics, various electronic components, and PCB design tools.
* Knowledge about DFM (Design for Manufacturing) analyzing.
* Hands-on experience in electro-mechanical systems.
* Effective communicator and excellent attention to detail.
* Knowledge about assembling and replacing SMD components.
* Set up and use test equipment like oscilloscopes, signal generators, spectrum analyzer, logic analyzer, and EMC tester.

**About the Internship**

**Micropolis Robotics**is seeking for highly motivated **Embedded Software Intern** to work in domain of Robotics. As part of the team candidate will work closely with power Electronics and Embedded software engineers to streamline the testing and drive process reliability with safety standards.

**Internship Responsibilities:**

* Deliver high-quality C code in a real-time embedded environment.
* Contribute to the elaboration of Embeddedsystem for the optimal operation of system prototypes.
* Participate in the prototyping, debugging and post-testing systems’ optimization.
* Contribute to the technical documentation of the project results.

**Should HAVES:**

* Student in computer Science or Communication, mechatronics engineering, etc.
* Skilled in C language.
* Good knowledge about software engineering (requirement, design, development, verification, validation).
* Knowledge about software of embedded devices (Microcontrollers).
* Knowledge about design lifecycle ideally within Aerospace, Automotive or similar controlled industry.
* Knowledge about communication protocols (CAN, Ethernet, I2c, SPI).
* Good scripting skills.
* Basic electronics knowledge.

**About the Internship**

**Micropolis Robotics**is seeking for highly motivated **ROS Developer Intern** to work in domain of Robotics. As part of the team candidate will work closely with Robotics Software engineer and Embedded software engineers to streamline the testing and drive process reliability with safety standards.

**Internship Responsibilities:**

* Background in Python, C/C++, and shell scripting under Linux.
* Contribute to the elaboration of build software stack for the robot’s platform
* Familiar with Git and integration of Git with CI/CD workflow tools.
* Familiar with mathematical foundation to be able to understand robotics algorithms.
* Participate in the prototyping, debugging and post-testing systems’ optimization.
* Contribute to the technical documentation of the project results.

**Should HAVES:**

* Student in computer Science or Communication, mechatronics engineering, etc.
* Knowledge of and experience with ROS.
* Knowledge of and experience with Gazebo simulator.
* Good understanding of hardware (electronics and mechanics)
* Good knowledge about software engineering (requirement, design, development, verification, validation).
* Knowledge about design lifecycle ideally within Aerospace, Automotive or similar controlled industry.
* Good scripting skills.
* Basic electronics knowledge.