October 28, 2019

Update: Emirates Team New Zealand

Junior Data Acquisition / Mechatronics Engineer wanted.

Emirates Team New Zealand are looking for a talented and enthusiastic electronics, mechatronics or mechanical engineer to contribute to the development and calibration of sensors and data acquisition systems on Emirates Team New Zealand’s race yacht that will defend the America’s Cup in 2021.

Sensors are a massive part of the competition: from helping to control the systems on yacht, to providing the instruments that guide the sailors, and collecting data for designers to analyse, we need to excel across all areas to be competitive.

You will be working with Emirates Team New Zealand’s design and build team, an extremely talented group of engineers, boat builders and technicians that cover many disciplines. We are a team, not a company, and this isn’t a typical nine-to-five… you will need to be committed and hard-working, and the rewards in seeing your work contribute to sailing success will give you job satisfaction you won’t find elsewhere.

You will be involved with the specification, manufacture, testing and calibration of a wide range of electronic systems and benefit from the experience of an existing small team of very skilled engineers. Despite being a small group with a unique focus, we are serious about accuracy, sensors and electronics; we are keen to use the latest technologies, and we work to very high standards.

The role:

- Work with design engineers to understand sensor requirements.
- Research instrumentation options and test new equipment.
- Manage the calibration of sensors, including load cells, IMUs, cameras, fibre optic strain sensors.
- Provide on-the-water support of sensors as required.
- Adapt as required through the campaign!

Depending on your specific skills, you could also be involved in:

- Design and prototyping in-house electronics and electrical devices
- Design of mechanical parts for sensors or sailor input devices, including 3D printing
- Development of software we run on the yacht for processing sensor data
- Development of software for live and historic display of sensor data (JavaScript React)
- Development of PLC code that controls the hydraulic systems on the yacht (we use Beckhoff)

What we’re looking for:
• A degree in electronics, mechatronics, or mechanical engineering
• If you are an electrical engineer, a good understanding and intuition of mechanical systems, calibration and measurement
• If you are a mechanical engineer, some experience in electronics and/or software development
• Talent, commitment and an enthusiasm for mechatronics.
• A meticulous eye for detail and a love of being organised.
• Ability to work and communicate well within a team, but not need 24-7 supervision.
• Ability to work under pressure, and work long hours when required.
• NZ citizen or existing work permit.
• Someone who can start by the end of November.

To apply visit the Emirates Team New Zealand website or Seek.

maxon motor Australia is an Official Supplier to Emirates Team New Zealand. We follow the progress of their journey as Defender in the 36th America’s Cup campaign, March 2021.

Length of this update: 451 words
First published on the internet at: https://emirates-team-new-zealand.americascup.com/
Re-pressed at: www.maxongroup.net.au

© Emirates Team New Zealand

maxon
The Swiss specialist for quality drives

maxon is a developer and manufacturer of brushed and brushless DC motors, as well as gearheads, encoders, controllers, and entire mechatronic systems. maxon drives are used wherever the requirements are particularly high: in NASA’s Mars rovers, in surgical power tools, in humanoid robots and in precision industrial applications, for example. To maintain its leadership in this demanding market, the company invests a considerable share of its annual revenue in research and development. Worldwide, maxon has more than 3000 employees at nine production sites and is represented by sales companies in more than 30 countries.