Project Name:

\textit{\textbf{\texttau Elemetry}}: TAU-racing Electronic car-management system and Telemetry for the 2011 Formula Student racing competition at Silverstone.

Project Description:

Data acquisition and electronic car-management are at the heart of modern day motorsport\(^1\). This project aims at developing a race-fit system for \textit{digital acquisition, processing and transmission} of data collected by a variety of sensors (including three-axis acceleration, temperature, wheel speed and suspension displacement) placed on the single-seater \textit{racing car} built by TAU Racing\(^2\), a team of Engineering students of the University of Aberdeen, to compete in the 2011 Formula Student\(^3\) event at Silverstone in July 2011.

Candidate Description:

BEng/MEng or Erasmus/Socrates exchange student in \textit{Electronics, Telecommunications} or \textit{Mechanical Engineering}.

Required Skills:

- Fundamentals of Digital Signal Processing (DSP) and Data Acquisition (DAQ).
- Experience with DAQ devices and software (e.g. LabVIEW).
- Experience with digital communication equipment and DSP software.

Project Period:

Within the Academic Year 2010-2011. The project should start early enough to allow development of the telemetry equipment during the preparation of the \textit{Formula Student} race at Silverstone (provisional dates 14-17 July 2011).

Contact:

Dr \textbf{Fabio Verdicchio}, School of Engineering (Electronics Research Group), University of Aberdeen. 
Address: University of Aberdeen, Aberdeen AB24 3UE, Scotland, United Kingdom. 
Email: fverdicc@abdn.ac.uk 
Webpage: \url{http://www.abdn.ac.uk/engineering/people/details.php?id=fverdicc} 
(or Google: Verdicchio Engineering Aberdeen)

\(^1\) \url{http://www.yourdiscovery.com/video/the-secret-life-of-formula-one-the-science-of-winning} 
\(^2\) \url{http://www.tauracing.com} 
\(^3\) \url{http://www.formulastudent.com}