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| **Proposed Title** | Smartphone Meter Reading System |
| **Supervisor and/or Client** | Supervisor: Dr Koren Ward (koren@uow.edu.au) |
| **Project Description** | The aim of this project is to develop an electricity, gas or water meter reading system that involves the use of a smartphone to take a photo of the meter and image processing software to extract the meter reading from the photo of the meter.  The smartphone also uses its GPS unit and a customer address (GPS) database to look up which customer’s meter has just been read, and then enters the customer’s meter reading into the database.  This system would significantly reduce the amount of work involved in reading meters. A customer version (smart phone app) could also be developed so that a customer could use his or her smart phone to read the meter and instantly see their current consumption and billing information based on the information in the image and the billing database.  There are two ways the system could be developed. One way is the have the smart phone send the photo of the meter to a server where the image processing and data logging is done. The other way involves processing the photo with the smart phone and sending the extracted meter reading to the server for entry into the database. This is up to the group to decide. |
| **Assumed Knowledge and Difficulty** | Experience or interest in programming smart phones and image processing would be an advantage.  The difficulty of this project is considered to be moderate. |
| **Platform, Key Technologies and Tools** | * Smart phone (iphone or android OS). * Server: Windows / Visual Studio. * OpenCV or other image processing libraries. |
| **Additional Resources** |  |