**RASBOT**
ECE Capstone Design Project, Spring 2014

**Advisor:**
Prof. Yanyong Zhang

**Members:**
- Alexander Hill – Linux/Network Guru
- Haoyang Yu – Python/WebCoder
- Lingnan Meng – Javascript Implementer
- Stefan Juang – Matlab/Image Programmer

**Introduction:**
Our project we created a rover that sends video through wireless internet to an external computing device that does the image processing. This cloud based computing platform allows its user a cheap and easy way to do remote image processing. Multiple users can also interact with the rover through our website. In case if the user want more than just drive around the rover, there is also the possibility of end-user add on detection.

**Website:**
[https://ram.labhill.com/](https://ram.labhill.com/)

**Demo:**
[https://www.youtube.com/watch?v=DsYe5stIfTE&feature=youtu.be](https://www.youtube.com/watch?v=DsYe5stIfTE&feature=youtu.be)

**Motivation:**
We wanted to design a robot that is very efficient and low cost in terms of the functionalities of a typical robot would have. Thus, we make use of cloud computing technology to reduce the cost of the heavy processing on the rover. Furthermore, through web server users can easily access the rover anywhere in the world as long as there is internet connection. Due to the low cost and easy interaction, our rover is great for military use and places that are too dangerous for people to venture to.