



Microcontroller/Environmental Sustainability Project

Wireless Dermoscope

Mission Statement

To design and create an affordable, efficient, wireless imaging device for dermatologic personal use.

Synopsis

Many people have dermatologic issues, which require a specialist to analyze. Typical skin conditions may require an initial visit to a primary care doctor and a referral to a dermatologist to inspect the area. Doctors currently have the ability to take pictures and videos of skin conditions, which they can share within the medical community or for publication purposes. By making a consumer device that can bridge the gap from the traditional approach of an office visit to a web based medical diagnosis capitalizing on modern technology available.

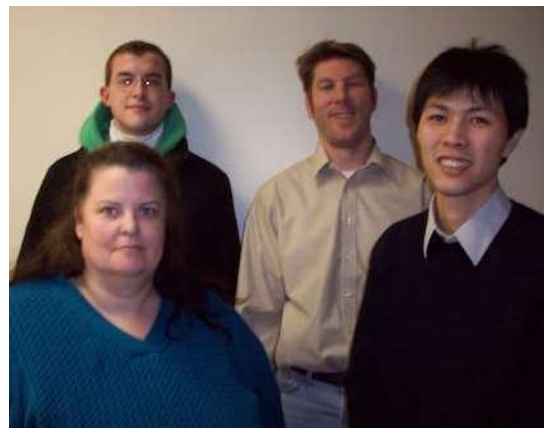
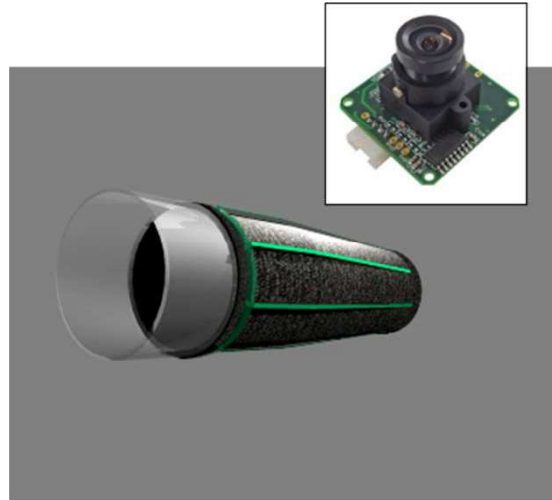
The dermoscope project is applying current technology in creating a dedicated dermatologic camera to capture images of skin afflictions; patients from home can receive necessary medical diagnosis. The treatment is possible through a dedicated website which contains a network of dermatologists willing to provide medical treatment and diagnosis from images.

Phase I – Accomplishments

- Operational camera device with proto board technology demonstrated.
- Determining medical requirements and limitations.
- Research optical possibilities.
- Evaluate other vendors with similar devices.
- Virtual design of case utilizing SolidWorks.

Phase II – Future work required

- Transmit data through WI-FI or blue tooth.
- Integrate camera with more complex development boards.
- Installation of components within case.



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