

## **Developing a mobile app to detect head lice using the motion microscope and AI**

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### **Company Background**

Wireless Fitness Technologies develops products with universities.

The president of Wireless Fitness Technologies is Robert Gold RPH, MBA, BCACP a pharmacist and co-inventor of the

Intelligent Basketball with Spalding and the wireless pill bottle and water bottle with UAH.

Description of the Work to be Done

Project Goal

There is not a scientific method to detect head lice. The current method involves inspection of the head which has been proven to be imprecise.

By using the motion microscope and ai a mobile app will be developed.

Using a phone app and a phone camera with the motion microscope which is open-source software that can reveal

details in video that are otherwise invisible. Kathleen Kelly evaluated the software and reports that the student could

download it and compile it.

<https://search.app/RPrtwYPmgTZ6avgE7>

The mobile app will monitor head lice move by exposure to light and tossing the hair. Katie Shepherd PHD from the lice institute has agreed to assist with the project. After the software is developed Katie Shepherd will test the mobile app.

Preferred Team size 4

Potential for future work

A positive test of the software could lead to future potential opportunities.

Location of work

Colorado School of Mines or can be done at work from home.

NDA will be required.

Requirements

● Research using the motion microscope to monitor head lice.

- Develop a mobile app with a phone.

- Functional prototype

Client Expectations

- Communication: Initial virtual meeting with Robert Gold followed by email update summaries every two weeks thereafter.

- A project report with:

- o Construction Drawings

- o Construction Instructions

- o Bill of Material

- o Testing Results

Suggested Review:

Wireless Fitness Technologies: <https://www.f6s.com/wirelessfitnesstechnologiesllc>