
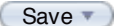


From: Larry Beaty <labeaty@bitstream.net>
Subject: **Re: [tc-ieee-php] Reminder: meeting with Senior Design class 6:00**
Date: September 15, 2011 9:36:53 PM CDT
To: Michael Callaghan <callaghanmd@gmail.com>, berge383@gmail.com, derek.berger@seagate.com, sdjames@iaxs.net
Cc: adamsdj@acm.org
 2 Attachments, 3.9 MB 

Michael, Steven, Derek,

I met with the 5 Senior Design students tonight. They seem to be a very good bunch, and aren't fighting the motivation and logistical problems that Derek struggled with at the beginning of the semester last spring. They had already met and talked at least a couple of times, and came with some good questions and ideas for improving signal quality over the two ideas we gave them to start with (array of sensors, differential-mode sensors). They are having some OK discussions about what the problem to be solved is, and some good discussions about how to solve it.

They are also very aware of everything Derek wrote about to do differently, and taking it to heart.

They are discussing sensors other than piezo, as they are aware of the big problems with piezo. They have some information on infrared (e.g., they know of a claim that a device transmits IR through several inches of a baby's body, so they wonder if we can place our receiver on the side of the arm or wrist opposite the transmitter), and one of them brought an interesting article on using magnetics to measure pulse wave velocity. The paper is attached. We think it's a student paper, so be a bit skeptical when reading it.

They'd like to know if they could do a project around the magnetic sensor, which is available for about \$15 from a company here in the cities. I definitely think we should have a project going on that technology, but I don't know if it's a good Senior Design project. How much electrical engineering is there for five guys to do on that project?

I told them I'd tell them in a day or two if they can do a magnetics-based sensor project. **Let me know what you think.**

Some of the students will be in the lab on Saturday. Even though there's a football game and parking will be a mess, it would be good if you guys could make it.

-Larry

(Chris, cc'ing you to add magnetics to your inventory. From the waveforms in that paper, I'd guess that it could work for either pulse transit time or pulse wave analysis devices.)

At 10:49 AM 9/15/2011, Michael Callaghan wrote:

I am not able to attend tonight.

Please let me know if you are planning a meeting saturday and I can make myself available.

<~>

Michael

On Sep 15, 2011, at 9:29 AM, Larry Beaty <labeaty@bitstream.net> wrote:

> This is just a reminder that I'm meeting with the Senior Design class this evening at 6:00 in the lab. Others are welcome to attend.

> -Larry

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> =====

> This list is used exclusively by members of the

> IEEE Phoenix Data Acquisition Prototype Team for discussion.

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