Engineering Update

Jeff Maggio

April 29, 2019

Going on Vacation on Wednesday

- Last day is Tuesday (05/06)
- I will sporadically check my email

Can I get a volunteer to collect packages for me while I'm gone?

Last week

- Substantive progress on the coil
 - Hardware related tasks are almost completely ready!
 - We have a major data collection and processing challenge
 - Please offer Zhetuo a helping hand this week!
 - Remember we have a really powerful server to make processing go faster!
- We got a 3D printer!
 - Wiki page up soon
 - I'm happy to train anyone on how to use it it's a very valuable skill



The 3D printer

- Saving grace for the coil project
- Especially useful for mounts, fixtures, and electronics
- Let's us do rapid prototyping & iterative design
- Can't be used for precise prints or optical work
- I'd love to teach people how to use it! It's a valuable skill!

General Lab Usage

- not dangerous, but does require training
- I'll create a wiki page for it in due time

Some things to note:

- <u>Don't touch the printer or table</u> while it's being used (this affects the quality of the prints)
- Parts of the printer are very hot (>200C)



Active Projects

High Priority (for next two days)

- Interviewing engineering undergrads
- Finishing hardware-related coil tasks for Zhetuo
 - · Documenting how to set things up
- Finalizing design for the bitebar station so I can order parts
 - Very close to done

Low Priority

- Documentation
 - Coil testing hardware
 - 3D printer usage
- New Bitebar Station and DDPI stage
 - Design is Done except for the bitebar mount + headrest
 - Ready to start ordering components
- DDPI safety endswitch
- DPI artificial eye fixture

Backburner

- Eyeris Driver
- Eyeris & Insight Gstreamer integration
- Bitflow Framegrabber testing with Ruei
 - New motherboard is in
 - On hold because it requires disassembly of the coil PC