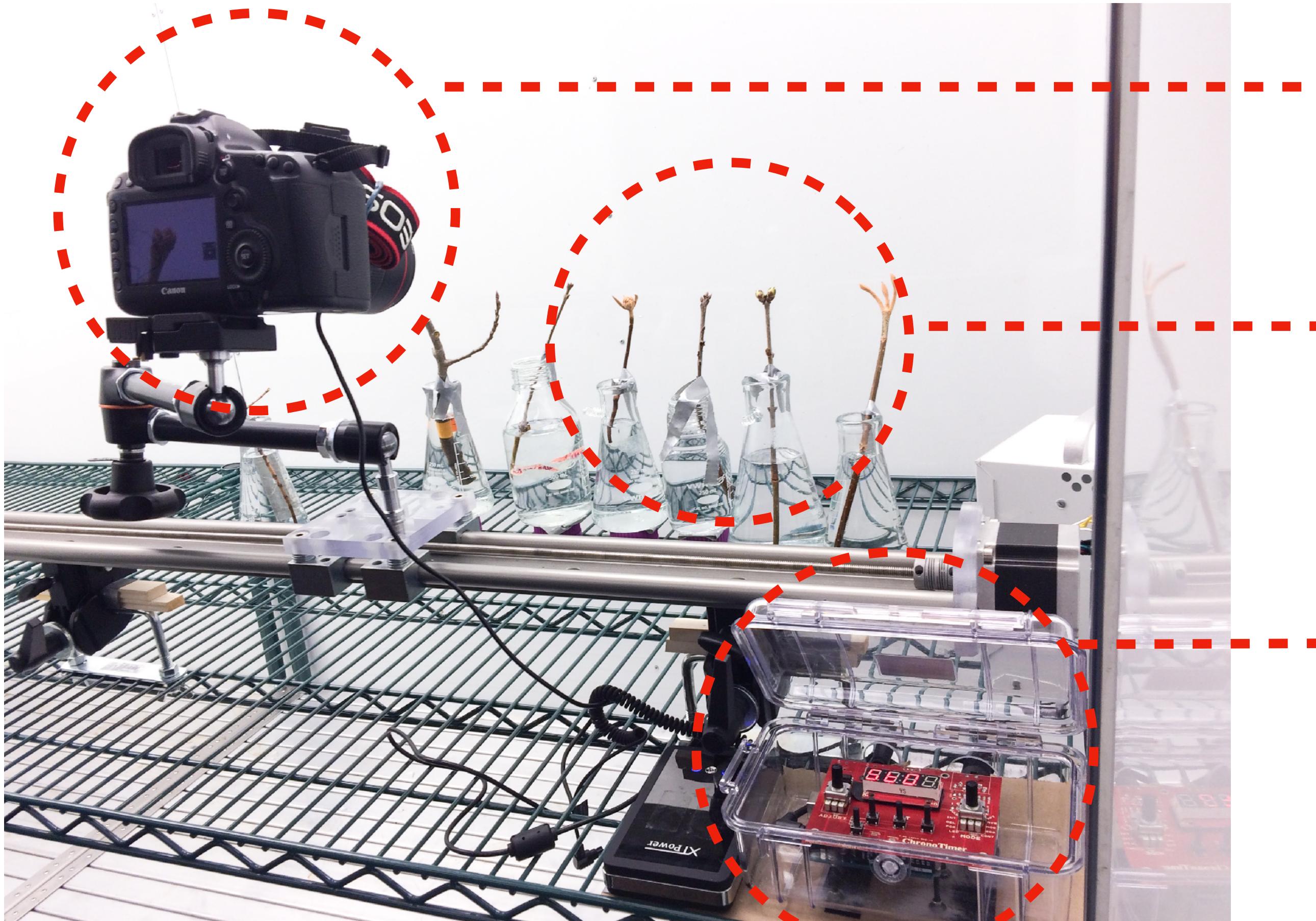


Translating Skills

There were three ways that skills from the lab translated to what I do in industry:



This is camera system I made at Temporal Ecology Lab. It takes automated pictures of plants and other things, and can do it when it's moving.

Communication

Learning how to communicate was a big takeaway for me. Success at whatever job you take on will be in some part a function of your communication skills.

Controlled Environment Ag / Instrument Expertise

We used controlled environment chambers to study plants for science. But controlled environment agriculture is a growing industry and you can enter if you have know-how with these instruments. Other instruments have similar industry relevance.

Electromechanical Engineering

Labs often need to make their own custom instrumentation to do their experiments. It turns out that building one-off pieces of technology is A Thing in industry and it's fun if you like making stuff.

Communication

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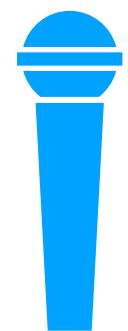
What I did at Temporal Ecology Lab



Built a website. Got decently handy with Wordpress, HTML, Javascript.



Leveraged the lab's camera equipment and learned some photography.



Learned how to give a presentation. Participated in job talk critiques, weekly lab guests at the center etc.

How it has helped me in industry:



Building slide decks. "Building a deck" is a highly valued skill in industry.
(note: this isn't a great slide deck)



Visual communication and storytelling. Lots of communication in industry is storytelling and especially the visual kind.



Speaking etc.

Controlled Environment Ag / Instrument Expertise

We used controlled environment chambers to study plants for science. But controlled environment agriculture is a growing industry and you can enter if you have know-how with these instruments.

What I did at Temporal Ecology Lab



We used these controlled-environment chambers to study phenology. They are specialized instruments and I developed some expertise and interest by operating them.

You can do this with other specialized instrumentation at your lab. For instance GCMS is highly relevant to various industries.

How it has helped me in industry:

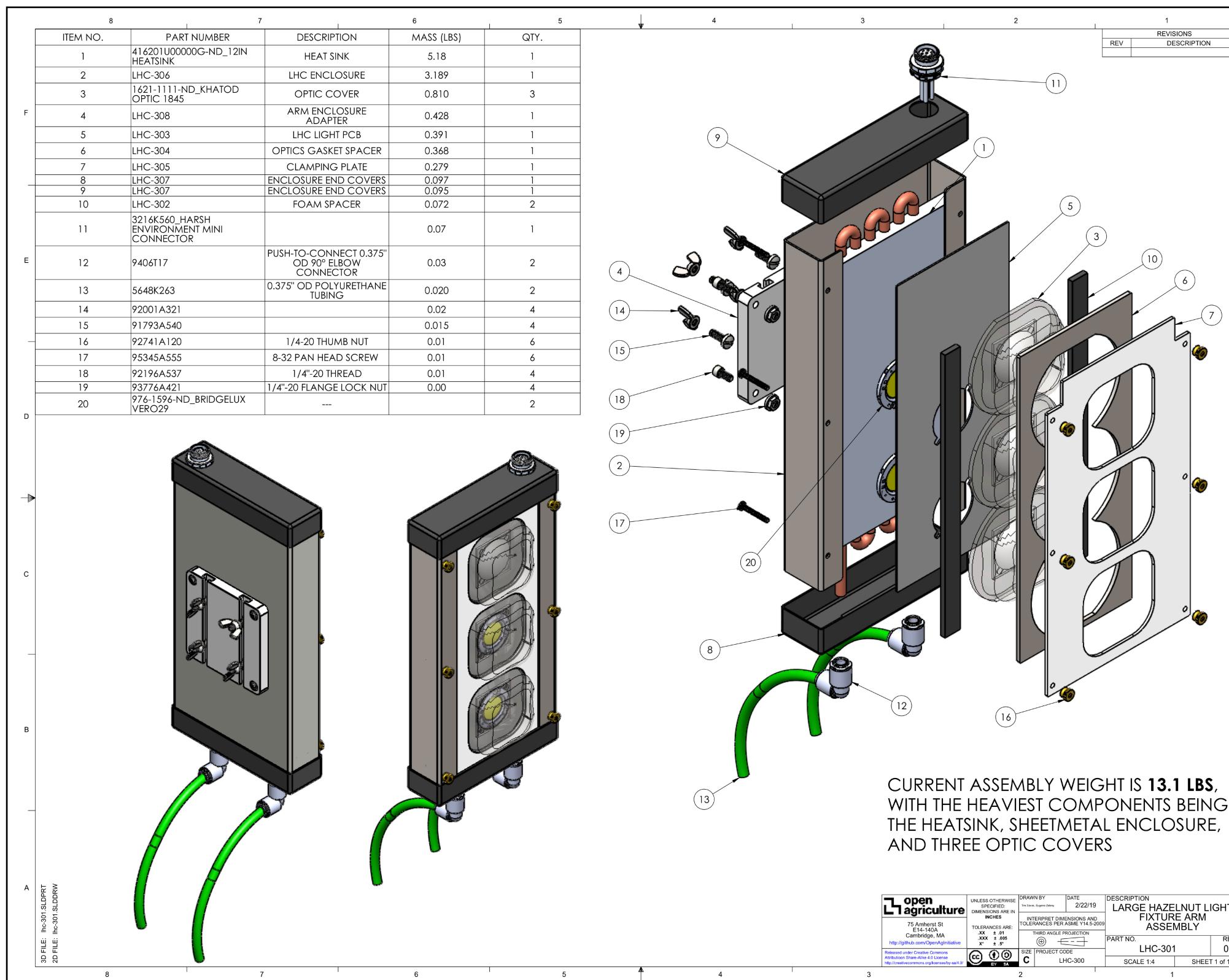


Worked as an engineer building controlled-environment growth chambers for growing food and other stuff. Lots of pretty neat start-ups and now larger companies doing this work nowadays (e.g. Small Hold). GCMS expertise could apply to many industries, for instance.

^Probably won't get paid a lot but it's fun.

Controlled Environment Ag / Instrument Expertise

We used controlled environment chambers to study plants for science. But controlled environment agriculture is a growing industry and you can enter if you have know-how with these instruments.



Controlled Environment Ag / Instrument Expertise

We used controlled environment chambers to study plants for science. But controlled environment agriculture is a growing industry and you can enter if you have know-how with these instruments.



Forbes

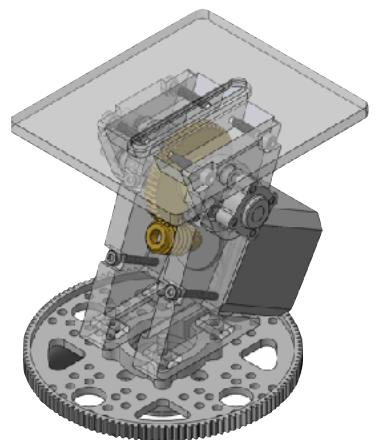
FOOD & DRINK • EDITORS' PICK

Mushroom Boom Leads Brooklyn Grower To Plant Its Organic Farms In The West

Electromechanical Engineering

Scientists often need to make their own custom instrumentation to do their experiments. It turns out that building one-off pieces of technology is A Thing in industry and it's fun if you like making stuff.

What I did at Temporal Ecology Lab

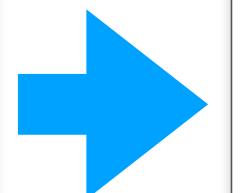


Built some electromechanical devices that had applications in the experiments we were doing.



Leveraged various free educational resources at the institution, specifically Harvard Extension and Machine Shop. Your institution/university probably offers free resources to you similar to this.

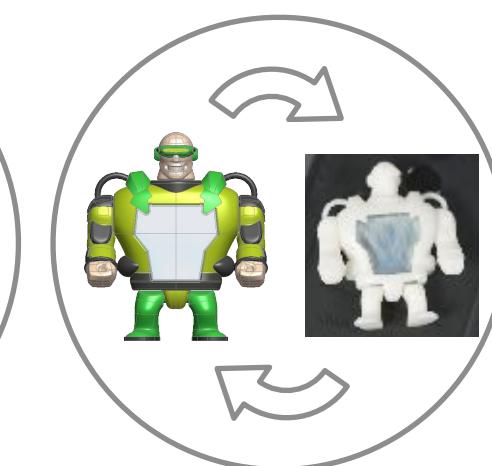
^Between these two things I found an interest in and got decent at this Thing: building gizmos for specialized purposes.



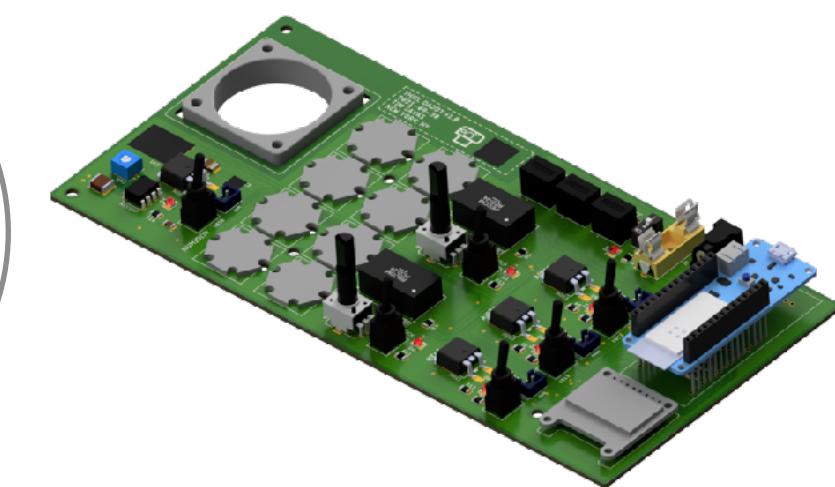
How it has helped me in industry:



Magnetic Interaction



Ynvisible

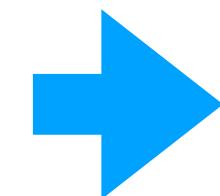


A lot of large companies in industry will have a department whose focus is speculating about future product. They often physically make proofs of concept there. E.g. Daimler Benz, BMW, Ferrero, Samsung, Apple, Meta, Google, 3M, most others etc.

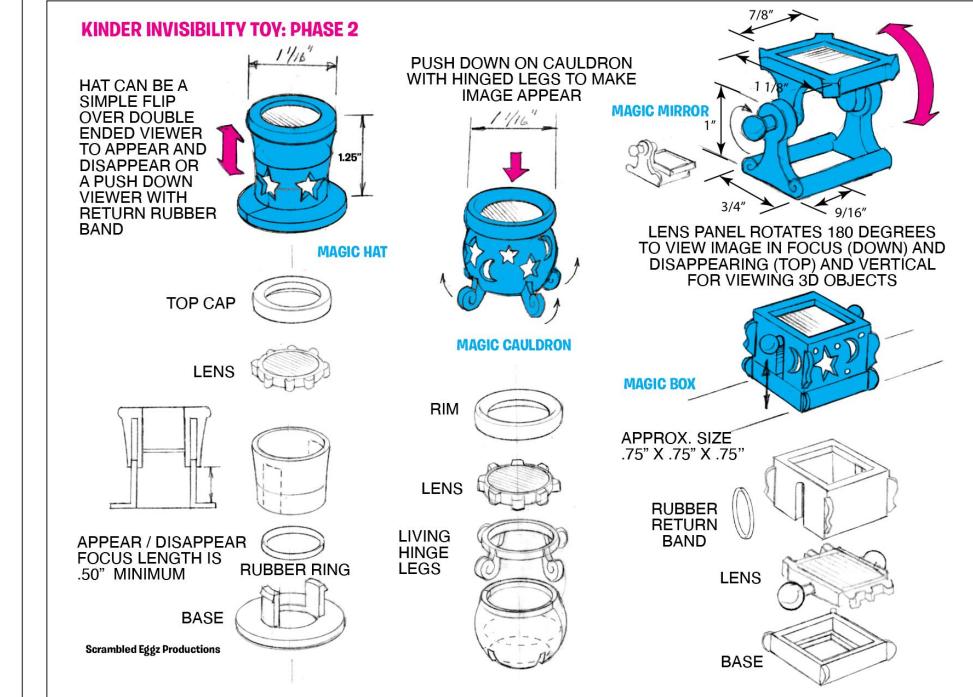
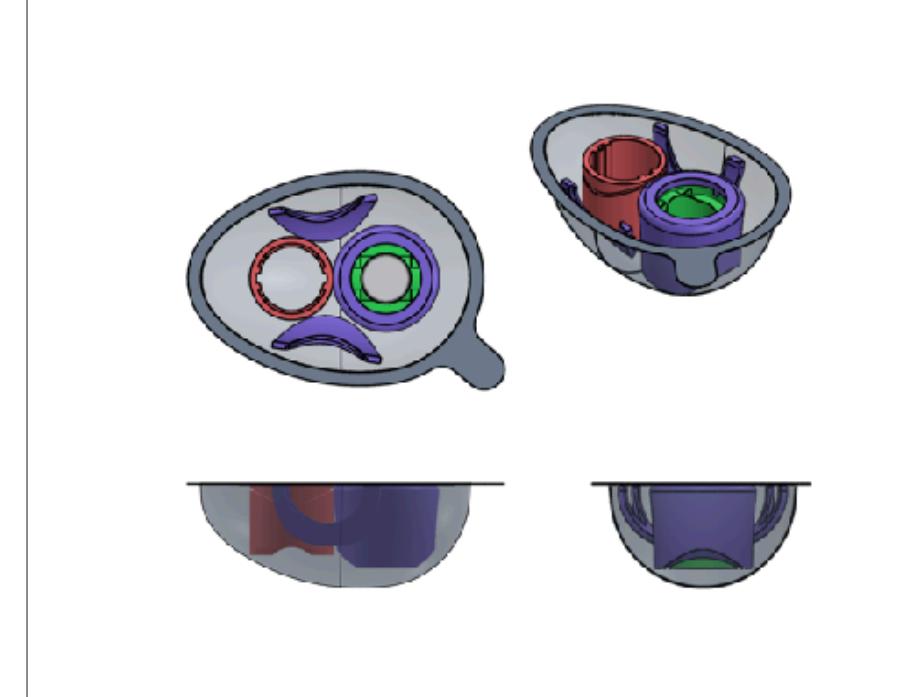
Electromechanical Engineering

Scientists often need to make their own custom instrumentation to do their experiments. It turns out that building one-off pieces of technology is A Thing in industry and it's fun if you like making stuff.

At the Lab I was making specialized devices for science:



I do similar work now but for product innovation in industry:



Resources at the Institutions:

You can leverage various kinds of resources at your institution for skill-building, mentorship, learning how to use equipment, doing **meaningful projects** etc.



Resources @ UBC:

I googled some resources at UBC and here are some good ones. Most big universities will offer these: free classes, certificate programs, maker spaces, multimedia equipment.

Tuition waivers

As an employee of UBC you and your dependent family members may be eligible to take many UBC courses without paying some or all of the tuition fee.

Home > Resources > Workshop + fabrication

Workshop + fabrication

We provide a variety of tools to translate design thinking into tangible objects. These include both traditional woodworking and digital fabrication tools.

Woodworking shop

Our comprehensive woodworking shop provides all tools required to produce anything from small models to full-sized building components. Students in all SALA programs can use it as a resource for both studio and technical courses. We train our students in the safe use of tools and machines appropriate to their projects.

Student MakerSpace

Location: KAIS 1180N

The MakerSpace is a self-serve facility containing fabrication equipment such as:

- an abrasive water-jet cutter
- 3D printers
- sheet metal brake
- sheet metal shear
- light tools for assembly and fabrication
- equipment for wood and plastics fabrication



UBC PHOTOSOC

About Us

MACHINE SHOPS & MAKERSPACE

The UBC Department of Mechanical Engineering provides support machining and fabricating services through the [Support Machining Services](#), as well as resources and training related to machining through the [Student Machine Shop](#) and access to fabrication tools through the [Student MakerSpace](#).

Programming in Python for Data Science

This course is part of the [UBC Key Capabilities in Data Science Certificate Program](#).

Here at the UBC Photographic Society, we offer a wide range of services including equipment rentals, studio access, film processing and scanning. Our events and workshops are suited to photographers at all levels and we encourage members to participate in our end-of-the-year photo galleries to showcase their work.

Contact info:

Happy to talk about skill building, industry vs. academia, writing cover letters, job-finding, salary negotiations, etc.

You can contact me any time, timothy.savas@gmail.com