

Research Opportunities

Why do research?

- Learn more about the world, pursue open questions that bother you, work with other smart people

How does it work?

- Get started: contact a prof you share interests with - or just get along with - and ask to do a research project with them.
- Directed studies: 490/497/499 - a project based course of independent study.
- Getting accepted: most profs are looking for smart, self-starting students for their labs. But we also get a lot of generic requests. So you need to stand out. The best is to get a referral from another researcher. But targeted, specific emails will also reach us.
- To get a position it helps to have some research project experience as an undergraduate. Shows interest and builds a reference network.
- At UVic, a masters degree in CS takes 20-24 months, requires 4 5XX level courses and a research seminar, and then a thesis. A PhD requires 4 other courses and a significant new contribution to the research literature.

Funding

- In Canada and the US, most thesis masters and all PhDs **are usually fully funded** - you will get paid (not enough) to conduct the research
- Caution: terminal masters (e.g., MTIS, MADS here) are professional degrees and cost a lot more.
- Co-op: some labs fund summer internships with co-ops.
- [NSERC USRA](#): Undergraduate student research awards. 6k for a semester of research work.
- [Jamie Cassels Awards](#): UVic only awards (1500\$) to do research projects
- NSERC scholarships: NSERC awards masters and doctoral scholarships for Canadian (citizen/PR) students. Then the department tops this up.

Accessible Data Science

What is "accessibility"?

- ensure all people can access our analysis with equity of outcomes

What are problems with accessibility of DSSE, based on what we have seen in the course?

Designing effective, accessible user interfaces - which is all a chart/report/paper/analysis is, really - is not simple! In fact the government has a large number of communications professionals who are specifically asked not to let engineers communicate with the public. But we can do better!

Accessibility for blind and low-vision audiences

- Vision loss pretty common! Especially among heavy computer users.

Screen readers example.

Voice Over Cmd- f5

Alt-text vs no alt-text on Twitter

Using properly formatted charts with SVGs and W3 standards

Alternate representations

Sonification of data charts

- Tactile interfaces

wikistix

raised curves