Should I apply for a Masters in CS?

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What is a masters in CS?

- An advanced technical degree.
- Usually a prerequisite for a PhD
- Usually a prerequisite for anyone interested in research.
- 4-6 courses + a thesis about a research project
- A thesis is typically a 60+ page document describing research you have done.
  - In CS it is typically a project, implementation, evaluation and prior work.
- You pay tuition but we pay you living expenses and tuition.

How does it differ from a PhD?

- A PhD is the precusor to a full-time career as a researcher.
- PhD is just for research. If you're not interested in research in that topic, do not get a PhD.
- PhD is 4+ years. Masters is 1-2+ years
- PhD can limit future job opportunities but grant access to jobs that require a PhD.

What is the benefit of a masters?

- Higher starting salaries
- Resume gets higher rank by human resources
- Certification of expertise in a specific field.
- Exposure to research – what if you like it? Or what if you don't?
- Fast-tracking to more managerial positions like project-lead or self-motivated research at an organization.
- You get paid to take a thesis-based masters.

What is the benefit of a thesis-based masters in CS here?

- Canadian Masters are respected graduate degrees. They typically are not cost recovery.
- Some interaction with Industry – a lot of funding is from industrial sources that require interning at local companies.
- You will be **paid**. That's right, a thesis-based masters typically pays ~24k per year w/ ~5k tuition for PR and Canadian students.
  - That's enough for food, rent, and car.

Who should get a masters?

- Students who are interested in expanding their undergrad education.
- Students who might have missed out on industrial experience and want more experience from school.
- Students who are considering a PhD.
- Students who have industrial experience and know they'd rather wait and get experience with cutting edge technology first.
- Don't get another undergrad degree. Get a masters!

Who shouldn't get a masters?

- Students who are done with school and totally burned out.
  - You can come back later if your GPA was good enough.
- Students who have a GPA lower than 3.1-3.2 and cannot defend against why that occurred.
- Students who don't want to.
  - Don't let your family tell you what to do if you don't want to .

What could I study?

- Software Engineering
  - How to build better software!
- Machine Learning
  - How to get computers to do pattern matching and data anlysis.
- Computer Vision
  - How to get computers to see!
- Computer Games
  - How to support game developers
  - How to build AI for human games
- Theory
  - How to
- Databases
  - How to store, query amd organize data
- Any course you took + more.

What do I need to do?

- Get some reference letters (3+)
- Make a CV
- Apply to the department by January 15 of the year you want to start.
- Apply for NSERC and AITF scholarships.
  - Get more money – have more flexibility!
- Apply to other schools too!
- Talk to professors!