CSC290 Communication Skills for Computer Scientists

Lisa Zhang

Lecture 1; Jan 7, 2019

Welcome to CSC290!

Introduction

- **Instructor**: Lisa Zhang
- **Email**: lczhang@cs.toronto.edu
  - Please prefix email subject with 'CSC290'
- **Office hours**: MF11:00-12:00, W13:00-14:00
  - Shared office hours with CSC338
- **Office**: DH3068

About your instructor

Before I started teaching, I was. . .

- a masters student doing research in Machine Learning
- a senior data scientist at an advertising technology company
- a startup founder of a data visualization company
- a software developer intern in various Silicon Valley companies, e.g. Facebook, ContextLogic (Wish)

I studied. . .

- machine learning at UofT
- pure math at UWaterloo

Ask me about anything outside of class, or empty office hours!

About you

- Pursuing CS major?
- What are your aspirations?
- Are you interested in research?
- What CS (or other) careers do you wish to pursue?
- What are your near term goals?
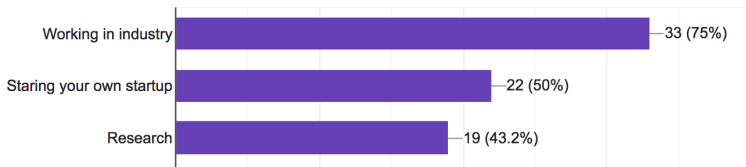
About you – survey

- ▶ You are a very diverse group!
  - ▶ mostly second years
  - ▶ transfer students, exchange students, etc
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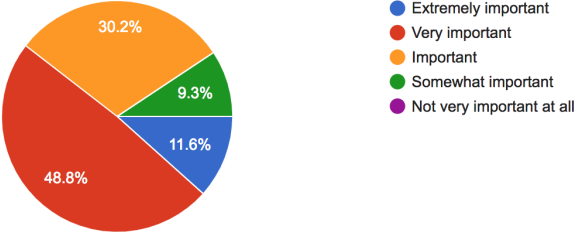
What career paths are you interested in?

44 responses

Most respondents agree that writing is important

How important do you think writing is for someone studying Computer Science?
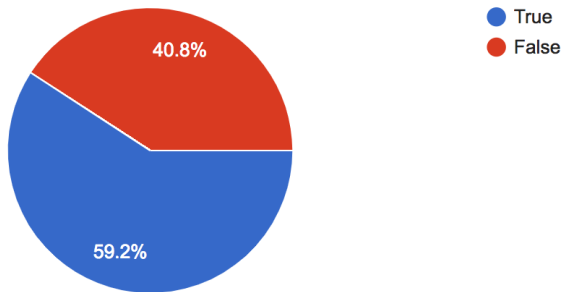
43 responses

- Extremely important
- Very important
- Important
- Somewhat important
- Not very important at all

30.2%
9.3%
11.6%
48.8%

But. . .

I would not be taking this course if it was not required.

49 responses

Maybe because . . .

How would you rate your academic writing skills?

44 responses

- Excellent
- Strong
- Competent
- Weak
- Very Weak

56.8%
25%
15.9%
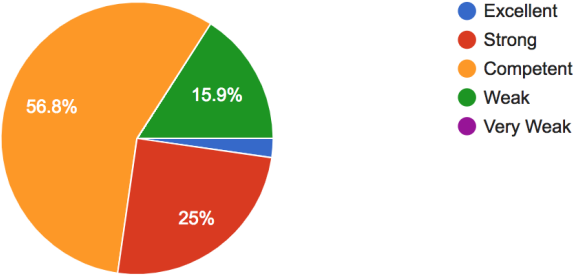
Why is CSC290 mandatory?

College graduates are highly confident of their abilities in both traditional "hard" and "soft" skill areas. Employers, on the other hand, are increasingly frustrated at what they see as a growing problem with graduates' soft skills, or rather, lack thereof.

– Carol et al. 2016. Mixed Signals: Do College Graduates Have the Soft Skills That Employers Want?

Survey

TABLE I: TOP 10 SOFT SKILLS EMPLOYERS SEEK IN COLLEGE GRADUATES

Skill	Employer %	% Employers feel college grads well prepared	% College grads feel well prepared	% Students surveyed feel well prepared
Hart Research Associates:				
Verbal communication	85	28	62	72.4
Teamwork	83	37	64	83.6
Written communication	82	27	65	84.1
Ethical judgment / decision making	81	30	62	65.4
Critical/analytical thinking	81	26	66	86.9
Applying knowledge & skills to real world	80	23	59	--
Problem-solving	70	24	59	87.9
Locating, organizing, and evaluating info	68	29	64	--
Innovation / creativity	65	25	57	--
Staying current on changing technologies	60	37	46	--

What are soft skills?

- How effective are you at working with others?
- How easy is it to work with you?
- Can you communicate succinctly and effectively?

What does a software developer write?

What does a software developer write?

- **Team**: meeting agendas and minutes, presentations, emails, memos, . . .
- **Customer**: survey, user manual, website, white paper, bug report, proposal, . . .
- **Project Management**: status report, bug report, proposal, requirements, test plan, . . .
- **Career Management**: resume, cover letter, job description, . . .

Course Goals

To develop skills in:

- ► Written communication
- ► Oral communication
- ► Interpersonal communication

In order to develop those skills, you will be:

- ► writing every week
- ► presenting during tutorials
- ► working in groups

Course Components

- **Lectures**:
  - Monday afternoons, lead by me
  - Introduce new material, exercises
- **Tutorials**:
  - Fridays, lead by TAs
  - Attendance is mandatory *starting this week*
- **Readings**:
  - No textbooks
  - Readings are posted weekly.
- Any material covered in lectures / tutorials / readings is fair game for the assignments, midterm, and exam.

Tutorial Section

- Make sure you have registered in a tutorial section in ACORN - by 11:59pm tonight.
- You must be able to attend the tutorial in which you are registered.
- You will be grouped with other students in your tutorial.
- **Tutorials start this week**

Evaluations

There is something due every week, so that you write regularly.

- Blog Posts (12%)
- Critical Review (10%)
- Critical Review Edits (2%)
- Group Project & Presentations (30%)
- Tutorial Participation (6%)
- Midterm (10%)
- Exam (30%)

Course Information Sheet Scavenger Hunt

- Which topic on the syllabus interest you the most? the least?
- How will blog posts be submitted?
- How will the critical review article be submitted?
- How will group projects be submitted?
- What is the late submission policy for this course?
- What is Turnitin.com what will the course staff use it for?
- What is plagarism and how can you avoid it?

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- You ask your friend to proofread your critical review article, and she points out issues that you could improve.

Course Expectations

- Use and check your UofT email address
- Check the course website and announcements
- Provide feedback to the instructor or TAs if/when necessary
- Work cooperatively with your group. Group work is *not* optional in this course as part of your learning outcome is to learn to work as part of a team.

The dreaded group work

- ▶ Group work can be frustrating, unpredictable, difficult
- ▶ But also important!

Frustration

- Frustration is okay!
- As a professional, you will feel frustrated on a daily basis, even if you love your job.
- Reacting and communicating well while frustrated is an important soft skill.

Challenge:

- Be introspective when frustrated.
- Treat frustration as a learning opportunity.
- Be the person that others find easy to work with.

Resources

The Robert Gillespie Academic Skills Centre (RGASC)
http://www.utm.utoronto.ca/asc/

- ▶ 3rd floor of the Library
- ▶ Make an appointment or visit a drop-in
- ▶ 30 minute sessions tailored to you
- ▶ Help with
    - ▶ Time management
    - ▶ Study habits
    - ▶ Writing (creating a thesis, arguing, editing, etc)
    - ▶ English language learning

Resources - Campus Happenings

Information & Instructional Technology Services (I&ITS) – aka. Service Desk @ CCT Atrium http://www.utm.utoronto.ca/iits/

AccessAbility Resource Centre (AARC) @ DV 2037 http://www.utm.utoronto.ca/accessability/

Career Centre @ DV 3094 http://www.utm.utoronto.ca/careers/

Questions?