

Video CV

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This paper provides guidance to instructors who would like to implement this lab. It provides information on the practicalities of introducing computing careers to students with little or no experience, and also points out areas where students may feel lost and how an instructor may respond.

1. OVERVIEW

This lab offers first-time CS1 students the chance to explore, discover and discuss various career opportunities afforded by a Computing major. This implementation paper discusses the use of guest lecturers, videos and other material to broaden the horizons for students with little or no prior experience.

2. INTRODUCING CAREERS

This lab is an opportunity to showcase interesting career opportunities afforded by a Computing major. Too often, students start with the misconception that computing leads to a basement programming job, which is an antiquated perception of the field. A couple of options exist here that may help broaden student understanding:

2.1 Guest Lectures

Guest lecturers from any computing-related field can be brought in to discuss their job. Guests can be local tech entrepreneurs, grad students and alumni – these groups work well and are usually happy to present their experience in front of a class. Furthermore, this enables a networking opportunity for students who want to find out more about entrepreneurship, academia or more typical career paths. This can either happen before the activity to provide some context, or afterwards, to solidify the careers that were discussed.

2.2 Videos and other Material

The use of the ACM Computing Careers poster is a great way to allow students to start thinking about potential careers, even if they lack previous experience:

http://computingcareers.acm.org/?page_id=58

Instruction could be further scaffolded by pointing students towards other resources, such as the following TED talks to start a discussion on the future of jobs, and the place computing and tech have in this evolution:

- 1) "What will future jobs look like?" https://www.ted.com/talks/andrew_mcafee_what_will_future_jobs_look_like/transcript?language=en
- 2) "A Tool that Lets you Touch Pixels" https://www.ted.com/talks/jinha_lee_a_tool_that_lets_you_touch_pixels
- 3) "Which computing pathway is right for me?" <http://www.ncwit.org/pace>

- 4) “University Pathway to IT and Computing Careers”
<http://www.ncwit.org/universitypathway>

3. STUDENT STRUGGLES

Students with limited experience may be at a loss when discussing ‘cool’ or innovative careers. Opening this lab with the use of the ACM Computing Careers poster (linked above) is a great way to get students thinking about the potential paths that may be available to them, without the jargon typically associated with computing.

4. BUILDING THE STUDENT COMMUNITY

Instructors may choose to ask students to work in pairs: either to create their videos, or discuss their individually-created videos. With smaller numbers, pairs can be tailored so students have different backgrounds in the subject matter; with larger numbers, students can choose a career path (e.g. one of the ACM Computing Careers) and then be paired with someone from a different career so they can explore the breadth of options available to them.

5. FLIPPING THE CLASSROOM

If possible, instructors may choose to assign the TED talks referenced above as material to be watched in advance of the class where this lab will take place. This would allow for the class to open with a discussion on the future of certain jobs, how computing comes into it, and most importantly, how a Computing graduate’s role fits this role. The use of guest lectures could be used to aid this discussion, or simply to provide additional opinions and points of view.