

Diversity Initiative in Computer Science Project Proposal

Chapman University

CPSC-298-06: Minorities in Computer Science

Project Title: Introducing Computer Science to Young Women of Color

Prepared By: Viviana Arroyo-Montiel, Minna Yu

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Problem/Opportunity:

- Briefly summarize the problem or opportunity you propose to address. Write this in terms of the problem being addressed, not in terms of the solution needed.

Example: Students in rural areas have unequal access to technology and we want to bring resources to these areas.

Lack of minority interest in Computer Science and how some people are never exposed to it and therefore never give it a try/enter the field.

Identify the statistics supporting your problem claim

- These bullet points should include numbers*
- Be specific they should back up your claim*
- Make sure you are CITING your sources with formal citations*

An overwhelming majority of Computer Science majors are white men (62% as of 2018). In comparison, POC make up a much smaller amount of that number (29%). POC women in particular are not well-represented in Computer Science majors, making up around 10% of Computer Science majors in the 2015-16 year. Additionally, even after entering the workforce, women will earn about \$16k less than men, and POC will earn about \$14k less than their white counterparts.

Project Type

- Is this project a club, a law, a mentoring program, a fundraiser?

Provide a few introductory courses for computer science to provide exposure and/or interest to the field (basically like a bootcamp).

Main Goal Statement

- This section defines the one central outcome that gives purpose and direction to the project. It is what you intend to do to accomplish to address the problem or opportunity identified above.

Example: Allow kids in rural america to have the same access to technology as their suburban counterparts by the end of 2025

Introduce more women of color to Computer Science from a young age to encourage them to further pursue it if they find it interesting.

Objective(s)

Objectives are specific, measurable, and timed outcomes of the project that are stated in terms of the problem solutions or opportunities users will experience. You won't be implementing these but plan as if you were.

Example We will fundraise \$10,000 by the end of the 2021 calendar year

Our ideal goal is to have a total of 100 attendees per area, assuming the program runs in the area for at least one month.

Project Leadership

- Full name: part of project they contributed for, be specific
- Sharon Chang:
- Viviana Arroyo-Montiel:

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- David Ulriksen:
- Minna Yu:

Project Steps

Clearly state the major steps necessary to complete the project goals and objectives. List steps sequentially.

Example: 1) Identify rural areas that are in need of computer science resources

2) Conduct survey to find out what exactly they need

3) Define criteria for selecting students eligible for help with resources

4) Identify and target possible donors

5) etc.

- 1) Identify minority-dominant communities
- 2) Conduct a survey to find out how many girls of color have heard of/interested in computer science
- 3) Evaluate if results are less than 50%
- 4) Fundraise money/identify donors needed to make the program as accessible as possible
- 5) Identify possible volunteers/ companies willing to help
- 6) Hire needed staff for the program
- 7) Create schedule for the program
- 8) Reach out to schools/other communities to spread awareness of the program/camp
- 9) Have interested target audience sign up

Functional Team and Other Resources

- *Example: researchers for survey purposes.*
- *Survey software*
- *School administrators*
- *Donors lists / connections*
- 1. Researchers for survey purposes
- 2. Survey Software
- 3. Teaching instructors
- 4. Donors
- 5. Laptops

Dependencies and Risks:

- Is the success of the project dependent on other factors?
- Are there significant risks to proper completion of the project or objectives?

Example: This project requires the specific skill sets of Jane Doe. The project schedule / budget is at risk if Jane is not available for a sufficient amount of time. Example: This project is dependent on the timely and successful by fall 2016.

While we would be able to set up these camps, success would largely depend on how many people decide to show up/attend them. If there is little to no interest then we could very well waste money and time in an area where we would gain little to no yield. Additionally, when we schedule these camps could also have a great effect. Doing it during the summer, when most kids are out of school, would probably be best, as they might be less likely to attend a CS camp in the middle of the school year or around finals season.

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Please feel free to add any other information or attach documents which will be helpful in understanding the project.

Sources:

Make sure you are including API format citations, including In-Text Citation!

Resource for help: <https://www.mendeley.com/guides/apa-citation-guide>

Myers, B. (2018). Women and Minorities in Tech, By the Numbers. Boone, IA: Wired.
<https://www.wired.com/story/computer-science-graduates-diversity/>