

Increase the number of women in computing

Vancouver, Canada Vancouver, Canada

Vincent Ohprecio

Project Stage:

Idea

Budget:

\$50,000 - \$100,000

Website:

<http://hackercollective.ca/>

- [Education](#)
- [Labor](#)
- [Technology](#)
- [Women's issues](#)
- [Transparency](#)

Project Summary

Elevator Pitch

Concise Summary: Help us pitch this solution! Provide an explanation within 3-4 short sentences.

Why isn't there enough women in computing? Can women learn to code? We know there's a solution. We aim to teach women how to code in a safe learning environment

About Project

Problem: What problem is this project trying to address?

There is a gender imbalance in software and computing fields. Very few women opt to become programmers, system administrators, or hardware/software engineers. The number of women who try, seems to be falling rather than rising. Many solutions try coercive schemes to achieve "gender parity". We propose to treat this as a journey, hoping for a global movement. There are many barriers faced by women in computing, such as the cost of education, and there is a struggle through the academic pipeline, from childhood to postdoctoral studies. Whether it's social conditioning or systematic institutional discouragement, women are simply not on equal footing for learning opportunities. Our aim is to share our success and give the tools to the community to reproduce in other communities.

Solution: What is the proposed solution? Please be specific!

Our program is a three-month, full-time, skills workshop for becoming a better programmer. The program will be free and provide space, structure, time to focus, and a friendly community of smart mentors. We are an agile, motivated, and passionate group dedicated to self-powered learning Ruby on Rails in several weeks, in a safe learning space for beginners. We provide an awesome space, a safe learning environment for beginners, and a learning structure to keep them on track. Each woman will bring passion to learn and we'll give them an experience they will never forget. We will take 12 women who are not software engineers and provide them skills to enter the workforce as Junior Developer/Programmers. Our goal will be to have all them employed as software engineers in BC. We intend to publish (open source) all of our budgets, lesson plans, and lectures. We want to teach women about software development in order to help them pursue their passions, their dreams, and ideas.

Impact: How does it Work

Example: Walk us through a specific example(s) of how this solution makes a difference; include its primary activities.

Twelve women will attend a safe learning space in the city of Vancouver. The immersive learning opportunity will be similar to a 90-day programming bootcamp. All computers and software will be available to use 24 hours a day, 7 days a week, to complete classroom projects. They will learn from experienced mentors using a proven industry curriculum. We're looking at a commitment of eight to ten weeks from attendees (that's roughly 400 hours). During weeks one to three, we'll learn how to program in the Ruby language. Working in pairs and small groups, we'll learn syntax, methods, tools, and command line. We'll push the code to the cloud using Git. By week 3, you'll be surprised what you know. We'll code. We'll make stuff. We'll have fun! Weeks four to five will expose us to HTML, CSS, Javascript, and Ruby on Rails. We'll slice and dice data with mad programming skills, explore how websites are built, and how web applications are made. We'll continue to work in pairs and work on small projects. We'll have guest instructors and speakers every week. By the time week six rolls around, we'll be ready to dive deep into Ruby on Rails and start building model view controller (MVC) applications. For the next three weeks, we'll learn about SQL and work on larger projects, and still in pairs. We'll make clone projects like, Twitter, Facebook, and bit.ly. We'll use object oriented programming (OOP) techniques and mash them with HTML, CSS, and Javascript for fun. Together, we will build the extraordinary!

Sustainability

Marketplace: Who else is addressing the problem outlined here? How does the proposed project differ from these approaches?

There are many ways for a beginner to learn how to program. You could pick up a book from the library and teach yourself or try online learning. There is a gap between teaching yourself and going to University for a 4 year Computer Science degree. It's not just about time and money, it's about being productive, competitive and having the right skills. Our solution provides a clear alternative to either of the traditional learning paths. Here's some places that we have stumbled across in our search for learning opportunities for women in computing: <https://www.hackerschool.com/> <http://www.girlswhocode.com/about/> <http://devbootcamp.com/> <http://railsgirls.com/> <http://starterleague.com/> Read more at: <http://hackercollective.ca/faq/>

Team

Founding Story

We have been passionate about providing opportunities to women in computing. Our small group of volunteers have noticed there aren't many women in technology. Why is that? How can we change that? In the summer of 2012, we explored the full business plan to bring a group of mentors together to provide a learning experience for women, unmatched in BC. Our group formed the Hacker Collective and we plan to launch the project for the summer of 2013. In the meanwhile, we have studied smaller weekend workshops targeting the Vancouver market. Following the success of the worldwide movement (<http://railsgirls.com>), we established Vancouver's first RailsGirls. In less than one week we registered 12 women committed to learning how to code. (<http://railsgirls.eventbrite.com/>). We have tremendous support from the programming community and we have found suitable space, built the curriculum, found mentors, and we are certain we will have an overwhelming response.

About You

Organization:

Hacker Collective

About You

First Name

Vincent

Last Name

Ohprecio

Twitter URL

<https://twitter.com/HackrCollective>

Facebook URL

About Your Organization

Organization Name

Hacker Collective

Organization Country

, BC, Vancouver

Country where this solution is creating social impact

, BC, Vancouver

Region in BC where your solution creates social impact

Vancouver, Coast and Mountains, Vancouver Island, Thompson Okanagan, Northern British Columbia, Cariboo Chilcotin Coast, Kootenay Rockies, Columbia Basin.

How long has your organization been operating?

Less than a year

The information you provide here will be used to fill in any parts of your profile that have been left blank, such as interests, organization information, and website. No contact information will be made public. Please uncheck here if you do not want this to happen..

Innovation

How long have you been in operation?

Still in idea phase, but looking to launch soon

Which of the following best describes the barrier(s) your solution addresses? Choose up to two

Access, Cost.

Social Impact

Please describe the goal of your initiative; outline what you are trying to achieve

Our primary goal is to make 12 new women programmers in BC and provide them access to technology, life-long learning skills, technical computer skills, technology expertise, and to support them so they are leaders and mentors for other women in computing.

Our secondary goal is to establish a foundation of materials that promotes and encourages participation. We want to facilitate the replication of our program and services in other organizations so that they may also create an atmosphere of inclusion and belonging for women in computing.

What has been the impact of your solution to date?

We are past the planning stages and committed to begin. We have identified volunteers ready to work with the project, and have planned out the logistics of the project.

The collection of volunteers have already started spreading the word and we have women already interested in participating.

What is your projected impact over the next five years?

Hundreds of women in computing. How will that change the industry? What might that do for BC?

We want to develop a sustainable ongoing program, with partner organizations, and a full complement of mentors. We want a dedicated learning space and we want to continue offering the program for free.

We want to be able to offer the program as barrier free for women. We envision industry support and community support. We look forward to establishing solid relationships and partnerships with the community.

We want to grow this project to reach all of the women in BC.

What barriers might hinder the success of your project? How do you plan to overcome them?

Staffing solely on a volunteer basis is not sustainable. This project is going to cost money: for the space, the equipment, and quality instruction.

For a project such as this to be sustainable, there will have to be both staff and volunteer positions. We will publish all of our materials because we think people make good projects, not just great ideas. We envision providing 'train the trainer' opportunities.

Each batch of graduates is a batch of potential mentors who can help teach classes on special topics.

The funds, if awarded, will be used to pay for the learning space, technology assets, and the sustainment of the program.

Winning entries present a strong plan for how they will achieve and track growth. Identify your six-month milestone for growing your impact

Teach and graduate 12 new women coders for the BC tech economy

Identify three major tasks you will have to complete to reach your six-month milestone

Task 1

Train 12 women as employable junior developers, ready to tackle the BC software and computing industry

Task 2

Develop the 12 women social capital and public profile. Programs written by the women will be shared publicly on the Internet.

Task 3

Foster life long learning, mentorship and volunteerism with opportunities to return as mentors.

Now think bigger! Identify your 12-month impact milestone

Establishing organizations with their own sustainable women learning to code projects and forging industry apprenticeships

Identify three major tasks you will have to complete to reach your 12-month milestone

Task 1

Publish for public consumption, the complete framework of learning materials from lectures to budgets.

Task 2

To establish a sustainable non-profit agency responsible for continuing the success of this project.

Task 3

Invest in mentor development and training, like "train the trainer" to evangelize the projects values and mission.

Sustainability

Tell us about your partnerships

We are currently leveraging the Rails Girls framework and material for weekend workshops. We are also leveraging experience from Hacker School. Our project lead and mentor is currently attending an exclusive free programming bootcamp in NYC with 50% enrollment by women. Industry sponsorship has provided enough funding to provide \$5000 grant assistance for women during their stay in NYC, in addition to the free tuition.

We want to establish collaborative partnerships with community and industry to share our values and vision.

Are you currently targeting other specific populations, locations, or markets for your solution? If so, where and why?

Our target population are underemployed or unemployed women, who can't afford to spend the time and money on getting a Computer Science degree in four years.

Our target population are women who need support, encouragement, access to role models, access to technology, and access to a safe learning environment.

What type of operating environment and internal organizational factors make your innovation successful?

We are using the industries best practices to introduce women to computing. We are providing the best barrier-free learning environment for their learning. We are sharing our values, network, knowledge, and time for their life-long learning success. We are fostering growth, innovation, and social equality.

Please elaborate on any needs or offers you have mentioned above and/or suggest categories of support that aren't specified within the list

Please join us in our successful project. We are committed to the success of this project, regardless of the funding outcomes, but we would really like your support.

Source URL: <https://www.changemakers.com/bcideas/entries/increase-number-women-computing#comment-0>