LAUNCH KIT

Sign up at tinyurl.com/includeparticipant.
Welcome to the #include Fellowship Program!

Thank you for your interest in the #include Fellowship Program. This is your Launch Kit. Use it as a resource as you embark on a journey into the world of technology and computer science. There are some starting ideas and tips here for #include projects, but you should take this opportunity to be creative. If you are passionate and excited about what you are doing, that will shine through and prove impactful.

Best of luck,
she++ & the #include Fellowship Team

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Hi there!

Welcome to this year’s #include Fellowship Program! she++ started this program in 2013 to help high school students in bringing tech education and opportunities to their local communities while cultivating their own technical skills. Now it’s your turn to make an impact and to share your passion for computer science.

Our #include participants have done some incredible things in past years, but we’re looking to you to bring your own unique ideas and perspectives to the table. While learning the basics of computer science, some organized coding parties and tech talks. We’ve had some #include participants hold robotics camps in Costa Rica, teach web development in Cambodia, and start their own nonprofits with the help of this Launch Kit, advisors, and other resources.

The best part about technology is how it relates to all your other values and interests. This year, we want the #include community to understand that computer science looks different in every community, and that, above all, is why we value you, your community and the diversity you all bring to the tech world. We’re challenging you to think of original and valuable ideas to help address the needs in your neighborhood, city, or state. In other words, our theme this year is **CS + Community**.

You don’t have to be a coding expert in order to make a difference through technology -- but you do have to care about making a difference. A lot of successful computer scientists aren’t just programmers--they’re innovators, leaders, and passionate about what they’re doing, no matter what it is. Our goal is to encourage you to learn computer science while supporting your endeavors to help your community.

As Sheryl Sandberg once said, “if you’re offered a seat on a rocket ship, don’t ask what seat! Just get on.” Here’s a secret: the hardest part of doing an initiative is just starting. You can do it - we’re rooting for you!

Christine and Samsara, #include Co-Directors
II. ABOUT THE #INCLUDE FELLOWSHIP

How does the #include Fellowship Program work?

The #include Fellowship is designed to help you accomplish two things: create your #include initiative and learn more about engineering and the tech industry.

Now that you’ve received your launch kit, you’ll spend the next few months working on your #include initiative. This can be anything that promotes technology in your community. Think about how your initiative can combine technology with another field you like, help dismantle negative stereotypes, and engage a diverse range of participants.

In January, applications will open for the #include Summit. Tell us about your initiative through videos, pictures, and a written application and interview with members of the she++ team. If selected, we will fly you out to the Silicon Valley, where you will visit companies like Facebook and Google, tour the Stanford campus, and meet prominent people in technology.

The #include Fellowship does not require you to have any prior technical experience. We want you to be a leader in your community first and foremost, and an important part of being a leader is your willingness to learn. Section IV. Resources of this Launch Kit contains learning resources for programming, and our extensive advising team will be available to answer any questions along the way.

Eligibility Requirements

The eligibility requirements to participate in the #include Fellowship are as follows:

- Currently enrolled in high school, or home-schooled at the high school level, with the intention of receiving a high school diploma or completing the GED within the next four years.
- Reside in the United States, Puerto Rico, U.S. Virgin Islands, or other U.S. territories.

The eligibility requirements to be a #include Advisor are as follows:

- Currently enrolled in college or graduated within the past three years
- Reside in the United States, Puerto Rico, U.S. Virgin Islands, or other U.S. territories.
TIMELINE OF IMPORTANT DATES

2017

September 6  Official #include Fellowship Program Kickoff
High school students can sign up to participate and receive Launch Kits. College students and recent college grads can sign up to be #include Advisors.

September to January  Program Period
Participants communicate with mentors and in take part in Q&A sessions. Taking pictures and documenting the initiative over time is highly encouraged!

2018

January 8  #include Summit Applications Open
she++ website, 12:00 AM
You can either write a short essay discussing what community outreach project you did, why you did it, and why you think it was impactful or film a short video about these points. We’d love for you to include pictures and footage of your initiatives!

January 29  #include Summit Applications Due
she++ website, 11:59 PM

Mid February  Interviews
Semi-finalists invited to conduct video interviews with members of the she++ team.

Late February  Final Decisions Released

April (TBD)  The 2017 #include Summit!
THE #INCLUDE SUMMIT

The culmination of the #include Fellowship Program is the #include Summit. 50 participants will be selected, through their applications and interviews, as the 2018 #include Fellows. They will be flown out for an all-expense paid trip to Silicon Valley, where they will meet industry leaders, experience the life of an engineer, and present their work at the she++ Gala, a celebration of movers and shakers in technology.

Here are some highlights from the 2016 summit! Photo credits go to Swetha Prabakaran, #include Fellow 2016.
III. GETTING STARTED

Who are #include Advisors?

As a #include Participant, the entire #include community of participants and advisors is here to help you find success with your initiative.

#include College Advisors
When you sign up to participate in the #include Fellowship Program, you can choose whether to receive a personal #include Advisor. Advisors are college students or recent college graduates studying technical fields, and are there to give you one-on-one advice. Ask them about getting started with programming, planning out your initiative, applying for the #include Summit, and more.

You can also post questions in our Facebook group or Piazza forum regardless of whether you have an Advisor. If you are assigned an Advisor, we encourage you to meet with him or her at least twice a month for the duration of the program.

We have gathered an all-star team of past #include Fellows to answer questions on our Piazza forum. Visit the link below and enter the access code when prompted to enter the forum, which has an online classroom structure. You can ask questions as “students”, and our mentors will answer them as “instructors.”

Facebook group link: http://tinyurl.com/includefacebook1718
Piazza forum link: http://piazza.com/she/fall2017/include1718
Access code: include1718

Webinars
We want the #include Fellowship Program to be as stress-free and rewarding a process as possible for you. We will be holding two webinars - one in November and one in December to talk about any challenges you might be facing, answer any questions you may have, and provide tips for the #include Summit application that opens in January.
ADVANCING TECHNICAL SKILLS

There are a variety of online resources out there that can help you develop your programming abilities, or find ways to teach other students if that is part of your initiative. Don’t worry about memorizing how to do something in that language, because not even professional programmers have all of the Java/C++/Python syntax and libraries memorized! What’s more important is learning about the programming concepts and ideas.

If you get stuck on how to do something, Google it or ask your #include advisor! Stackoverflow.com is another great resource.

How to learn more about programming

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<thead>
<tr>
<th>Platform</th>
<th>Website</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDACITY</td>
<td>udacity.com</td>
<td>Study CS101 at your own pace and discover the magic of programming.</td>
</tr>
<tr>
<td>CODEHS</td>
<td>codeshs.com</td>
<td>Learn simple programming with Karel the Dog and move on to a curriculum of step-by-step tutorials, videos and exercises. CodeHS also provides online tutors if you get stuck.</td>
</tr>
<tr>
<td>LEARN PYTHON</td>
<td>learnpythonhardway.org/book</td>
<td>Don’t let the name fool you! Learning Python can be fun, and this online book takes you through multiple exercises to teach you the language.</td>
</tr>
<tr>
<td>CODE.ORG</td>
<td>code.org</td>
<td>Check out this non-profit dedicated to expanding participation in computer science by making it available in more schools.</td>
</tr>
<tr>
<td>CODE ACADEMY</td>
<td>codeacademy.com</td>
<td>Code Academy has many courses designed for beginners to help teach you a language as well as the fundamentals of programming.</td>
</tr>
<tr>
<td>KHAN ACADEMY</td>
<td>khanacademy.org</td>
<td>Khan Academy has a series of web videos to help you learn their programming language. Make animations, simulate games and discover the logic behind programming.</td>
</tr>
<tr>
<td>SCRATCH PROGRAMMING</td>
<td>scratch.mit.edu</td>
<td>Learn programming through a visual drag and drop interface. Great for total beginners to play around with. There is also a large community to share your projects with online.</td>
</tr>
<tr>
<td>CODINGBAT</td>
<td>codingbat.com</td>
<td>If you already know a little bit of Java or Python, but you want to practice, this is a great resource.</td>
</tr>
<tr>
<td>TOUCHDEVELOP</td>
<td>touchdevelop.com</td>
<td>Make Windows 8 apps straight from your phone or computer! With a mobile-optimized website, TouchDevelop makes it easy for users to make apps while playing around on their phones. It has some starter files for inspiration, as well as a community to share your apps with or ask questions. Check out the getting started page if you’re new to programming.</td>
</tr>
<tr>
<td>KIDSRUBY</td>
<td>kidsruby.com</td>
<td>Learn Ruby programming through an environment made for kids. Enjoy adorable graphics as you learn this powerful programming language.</td>
</tr>
<tr>
<td>MICROSOFT VIRTUAL ACADEMY</td>
<td>microsoftvirtualacademy.com</td>
<td>Pick up a programming language through Microsoft’s Virtual Academy, with a variety of topics for beginners to advanced programmers.</td>
</tr>
<tr>
<td>ORACLE ACADEMY</td>
<td>academy.oracle.com</td>
<td>Provides a self-study curriculum that teaches coding using Alice, Greenfoot, and Java.</td>
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</tbody>
</table>
IV. BRAINSTORMING YOUR #INCLUDE INITIATIVE

What’s a #include initiative?
A #include initiative is any sort of structured event, activity, or group designed to spread awareness or knowledge about tech or tech education in your community.

Find a need
Page 1. Research
What resources does your community lack? What audience could you serve? How can you improve access?

Find your interests
Page 2. Passions & Interests
What do you want to learn more about? What, and who do you enjoy working with? Why?

Choose your intersection.
Page 3. Project Brainstorming
Is there a group in your community that could benefit from technology? Do you want to work with elementary school students? High school students? Senior citizens? Nonprofits? Businesses? Write your interests on one side, and community needs on the other. Find a way to bring them together.

Identify the resources in your community
Page 4. Resources For Your Project
What kind of resources does your community already have? A computer class? An engineering class? Volunteer groups? Local community organizations or nonprofits? Who uses these resources? How can they be expanded or improved? How can you work with them?
## RESEARCH

Doing research on your topics of interest and the needs in your community is important to learn more about how your work can impact the lives of others. Figure out the questions you want to ask, who you want to ask them to, and when you want to know the answers by.

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>SOURCES</th>
<th>DATES</th>
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<tbody>
<tr>
<td>what are the questions you really want to know?</td>
<td>who should you ask for advice? Think first community, regional and then large-scale.</td>
<td>schedule plans to meet up with them or send an email. Make plans for when you want to find this information.</td>
</tr>
<tr>
<td>1. What does your community have already (resources)?</td>
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<tr>
<td>2. What does it need?</td>
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**Notes:**
- **Questions:**
  1. What does your community have already (resources)?
  2. What does it need?

**Sources:**
- Think first community, regional and then large-scale.

**Dates:**
- Schedule plans to meet up with them or send an email. Make plans for when you want to find this information.
Computer science and engineering are such huge umbrellas and most people have more specific interests in that umbrella. Get specific about what you want to work on and/or learn, and choose your top 3 to 5 interests.

**PASSIONS & INTERESTS**

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<tbody>
<tr>
<td>Databases</td>
<td>Android &amp; iOS</td>
<td>Computational Biology</td>
<td>Computer Vision: AR &amp; VR</td>
</tr>
<tr>
<td>Web Design</td>
<td>STEM Education</td>
<td>Robotics, Arduino</td>
<td>Music &amp; Technology</td>
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**ENGINEERING**

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<thead>
<tr>
<th>Aerospace</th>
<th>Environment</th>
<th>Civil</th>
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<tbody>
<tr>
<td>Agricultural</td>
<td>Marine &amp; Ocean</td>
<td>Energy</td>
</tr>
<tr>
<td>Bioengineering</td>
<td>Mechanical</td>
<td>Biomedical</td>
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</table>

**ANYTHING ELSE?**

We definitely missed a handful of topics. Help us list other things you’re interested in, technical and nontechnical!
<table>
<thead>
<tr>
<th>Needs of the community</th>
<th>Your technical interests</th>
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RESOURCES FOR YOUR PROJECT

No woman or man is an island. What groups will you need to collaborate with to bring this project to life? What resources will you need to host a workshop, or what speakers will you need for a speaker series? What dates do you need this all by?

Think teamwork. We want your work to continue after just this year, so working with local organizations and groups will let community building grow more and more for an issue you all care about.

<table>
<thead>
<tr>
<th>NEEDS</th>
<th>SOURCES</th>
<th>DATES</th>
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</thead>
<tbody>
<tr>
<td>what resources do you need to do this project? Speakers, equipment, venues, volunteers, etc.?</td>
<td>Where can you get these resources? Who can help you? Reach out to clubs, community organizations, teachers, etc.</td>
<td>Have you gotten approval to borrow equipment? When do you need volunteers? When do you need to pick up/return gear?</td>
</tr>
</tbody>
</table>
SPREADING THE WORD

The best projects are not accomplished alone. Try to find people, groups or organizations that can help you reach your goals. Are there other people who share a similar mission? See if you can collaborate, combine forces, or seek advice. Here are some ideas to get you started.

COMMUNITY
- High school teachers
- Friends’ parents
- Community centers
- Nearby libraries or librarians

REGIONAL
- Colleges and professors
- Local non-profits
- City government
- Research or industry labs in your area
- Local newspapers or magazines

LARGE SCALE NON-PROFITS
- Check if these organizations have offices, programs, or representatives in your area. Reach out via email and ask for support or mentorship. See if they can point you in the right direction or put you in contact with others that may be able to help. If they are a she++ partner or we have worked with them in the past, we can help introduce you. Examples are:
  - Girls Who Code
  - Black Girls Code
  - Code 2040
  - NCWIT
SHARING WITH YOUR COMMUNITY

We want your initiative to reach as many people as possible, so be sure to think about ways in which you can let your community know about your initiative -- and how they can get involved! Check off the publicity strategies you’ve used.

**FLYERS**
Never underestimate the power of posters! Post them around:
- Your school
- Community centers
- Libraries
- Local businesses

**LOCAL MEDIA**
Not everyone sees news online! Reach out to the local:
- Newspapers
- Television stations
- Radio stations

**SOCIAL MEDIA**
How do you publicize your event online?
- Facebook
- Instagram
- Tumblr
- Twitter
- Website

**WORD OF MOUTH**
Sometimes the best the way to get the word out is to tell them yourself! Ask the following people to spread the word:
- Teachers
- Librarians
- Your friends

**BLOG**
Write a blog post or article and publish it online. Think of different ways that you can reach people and the type of audience you want to address. You can post on a personal or community blog, publish to sites such as Medium, or ask a school newspaper to include an article about your work.
SHARING WITH YOUR COMMUNITY: How to write a good email

Sending professional, articulate emails to potential partners can be one of the most daunting parts of leading an initiative -- even for the pros! Review the example email below to learn the best way to communicate with members of your community!

Dear Mrs. Chen,

My name is Christine Phan and I’m currently a student at Thomas Jefferson High School. I used to attend Wilson Middle School during your first year as principal; I hope everything is going well.

I’m emailing to ask you about starting an after school program for middle school students to learn how to code at Wilson Middle School. This past year, I’ve learned how valuable learning how to code is through my class / online schools / other program and would love to bring this to my own community.

The program would be 8-10 weeks long and fit in with Wilson’s pre-existing extracurricular program. By bringing in high school volunteers to help me run this, we can teach students through the online platforms of Scratch and Code.org to create their own animated storybooks and video games and introduce them to the world of computer science.

Would your school be interested in working with me to make this project a reality? Please let me know if you have any questions or concerns. This is a project I would love to take on and give back to the community, and I hope to hear from you soon.

Best,
Christine Phan

TIP 1: Begin with a formal greeting
TIP 2: Introduce yourself and define your relationship
TIP 3: Propose and explain why you are choosing to take on an initiative
TIP 4: Provide specific details about the initiative. Describe what the partner’s role is/how it fits it with their existing programs
TIP 5: Ask if the partner is interested and provide a call to action.
TIP 6: Be available to answer any questions
TIP 7: End with a formal closing and your full name
FINDING FUNDING FOR YOUR INITIATIVE

If your #include project looks like it’s going to require some funding, here are some ideas that can help.

**TALK TO YOUR SCHOOL**
Talk to your principal, teachers or parents about any funding opportunities or grants from your school.

**FUNDRAISE**
- Throw a bake sale
- Run a car wash
- Host a fundraising event

**LOOK FOR GRANTS**
Look for grants in STEM education/outreach or find sponsors in your community.

**SEEK OUT NONPROFITS**
Look for nonprofits doing similar outreach.
Discuss whether they can support you in any way.
If they are a she++ partner (like Girls Who Code), we can help introduce you. Email us at includefellowship@sheplusplus.org

**INDIEGOGO**
Pitch your idea on the platform to generate awareness and funding for your idea.
SUGGESTED INITIATIVE TIMELINE

If you’ve never programmed before or have no idea where to start in organizing your initiative, don’t worry! Here’s a rough timeline. Use our brainstorms in the past few pages to build ideas and networks for your initiative.

Month 1 Planning time
- What makes you? Figure out what you want to incorporate with tech -- your own individual interests, the needs of the community, and more. Use the previous pages in this launch kit to map out an initiative!
- Decide what your initiative will consist of – will you organize an after-school club, hackathon (a fancy word for large coding party), tech talk, or something else?
- What is your vision and end goal?

Month 2 Take care of logistics
- Get the word out about your initiative! Post on Facebook and Instagram, put up flyers in your school or community, email people, and spread the word.
- Do you need funding? If your initiative’s participants don’t have laptops or you need certain tools, you can apply for grants or get local companies to sponsor you.
- Secure a venue for your initiative. Common venues we've seen are schools, libraries, community centers, and more.
- Look for speakers, volunteers, and other manpower.
- What equipment do you need?

Month 2, 3, 4 Program time
- Hold your initiative! Learn computer science with your friends and have fun mixing technology with other fields!

Month 4 Prepare for #include Summit Applications
- Consider organizing a final project demonstration for participants in your initiative if applicable.
- Survey your initiative’s participants to see what they’ve learned!
- Apply for the #include Summit - applications are due at the end of January.
Throughout the #include program, she++ will be periodically checking in to see how your initiative is going. This is a great time to bring in some statistics and details on how your own participants feel about how well the initiative is doing. We strongly advise you to collect the following data – it’ll help you learn more about computer science as a field, too!

At the beginning of your initiative

What’s your audience like? How much CS do they know, and what’s their interest level? These are great things to learn about so you can create the best initiative for your audience.

Suggested questions to include in your pre-initiative survey:

- What’s your name, age, gender, and/or ethnicity?
- On a scale of 1 to 5 (where 5 is very likely; 1 is not likely at all), how likely are you to take a computer science class in the future?
- Briefly describe your experience with technology.
- When you think of a programmer, what stereotype comes to your mind?

At the end of your initiative

What did your audience gain from your initiative? Did their views on computer science end up changing? Remember, your program doesn’t have to end just because the school year is ending. Many #include initiatives turn into full-fledged non-profit orgs, and so can yours! It’s great to learn how your program can improve for the future.

Suggest questions to include in your post-initiative survey:

- On a scale of 1 to 5, how much did you enjoy the program?
- What aspect of the program did you least like?
- How have your views on CS changed?
- What did you learn about CS? What would you like to learn more about?

We recommend using Google Forms or Typeform for digital surveys. You can always interview or do pen-and-paper surveys too!
Ella Hoffman-Coyle - Tech Arts
Tech Arts is an afterschool program where students of varying artistic backgrounds gather to build art installations using technological components. Recently, one of Tech Art’s installations was showcased at Aurora, a local Dallas light and installation festival.

Emmanuel Marquez - ArduFriends
ArduFriends, an initiative aimed at diversifying the engineering field, broke the intimidation barrier that prevents many students at their school from approaching EECS by working with teachers to host classroom Arduino workshops. Students grades 6-9 get the opportunity to build circuits and write code with Arduino, a user-friendly microcontroller.

Keran Herran - Bioinformatics Introduction
For her #include Initiative, Keren used exercises, molecular models, slides, online resources, and Scratch/Java programs, to develop a unique introductory course on Bioinformatics tailored to elementary and middle-school students.

Maria Meija - Code | Art | Miami
Maria combined her talent in CS and her interest in art to create Code | Art | Miami, a digital art symposium and competition that aims to inspire girls to code. During the event, Maria and her team sold auction items and custom-made art pieces. They raised over $7,000 to fund a scholarship for a young woman to attend Miami Dade College’s new animation and gaming complex.
Good Luck!
If you have any questions, contact the #include Fellowship Co-Directors Christine Phan and Samsara Durvasula (includefellowship@sheplusplus.org).

Follow us on twitter @sheplusplus
Like us on facebook.com/sheplusplus
Sign up for our mailing list at sheplusplus.org