



Hack Upstate's Careers in Code

A Coding Bootcamp for Women and Minorities to Combat Poverty in CNY

Transparency Report - Cohort 1

First Day of Class: 3/11/2019

Graduation Date: 8/22/2019

Outcomes Reporting Period: 8/23/2019 - 2/18/2020 (180 days)

Jesse Peplinski

jesse@hackupstate.com

315.409.3514

Doug Crescenzi

doug@hackupstate.com

315.436.8655

About Hack Upstate	3
Mission	3
Events	3
About Careers in Code	3
Problem 1: CNY Poverty Rate	3
Problem 2: Churn Rate	3
Solution	3
About this Report	4
Feedback Collected	4
Student Outcomes Report	4
Decreasing the Barriers to Entry	4
Free Tuition	4
Free 2017 Macbook Pro Laptop	4
Free Syracuse CoWorks Membership	5
Student Stipends	5
Student Success Representative	5
Class Duration and Time	5
Program Reflection	5
Admissions and Enrollment Process	5
Students	5
Instructors and Teaching Assistants	6
Partnerships	6
Onondaga County and the Alliance For Economic Inclusion	6
The Technology Garden and CenterState CEO	7
Syracuse CoWorks	7
Local Employers	7
Soft Skill Development	7
Networking Events / Local Developer Meetups	8
Guest Speakers	9
Mock Interviews	9
Community Support and Feedback	9
Students	9
Instructors and Teaching Assistants	9
Careers in Code Staff	10
Capstone Project	10
Curriculum	11
Kickoff and Graduation Ceremonies	11
Systems, Tools, and Processes	12
Student Success Representative	12
What's Next?	13
Thank You	14

About Hack Upstate

Mission

Hack Upstate's mission is to Advance Central and Upstate New York's Technology Community through events and education. In doing so, we aim to contribute to the growth of Upstate New York's technology sector, and to create a robust network of technologists and regional technology companies.

Events

Throughout the past five years we've successfully organized:

- **14** biannual hackathons
- **5** app challenges in partnership with [AT&T](#)
- AT&T's [Youth Code Project](#)
- [Hack Mohawk Valley](#), Utica's first community hackathon
- [Careers in Code](#), a free coding bootcamp for women & minorities to help fight poverty in CNY

We've helped facilitate dozens of STEM job placements with local employers including Terakeet, TCGplayer, Rosie, Cornell University, Syracuse University and Upstate Interactive, among others.

About Careers in Code

Problem 1: CNY Poverty Rate

Poverty throughout Central New York is rising at an accelerated rate and stifling our region's economic potential. In 2018, Syracuse, NY was named one of the top ten most impoverished cities across all of U.S. To put that into perspective, Roughly 1 in every 3 people in Syracuse live in poverty. In particular, there are few opportunities for women and minorities to advance in concentrated areas of extreme poverty. Equal access to educational and employment opportunities are simply not available to them.

Problem 2: Churn Rate

At the same time, many Central New York employers are struggling to hire local software developers. Software developers are critical to their growth, but at this time our regional talent pool isn't large enough to support their needs. Consequently, employers that want to hire locally are often left with no choice but to outsource their work to 3rd party consultants and contractors that operate outside of Central New York.

Solution

Careers in Code is Hack Upstate's new initiative to help advance Central New York's tech community by offering computer programming education to help fight poverty. It is a 24-week program aimed at women and minorities from distressed areas of central New York — poverty in these neighborhoods means residents don't have equal opportunities to access education and employment opportunities, and our bootcamp was created to help close this gap and increase our region's economic potential.

About this Report

This report includes information and reflection regarding our objectives, successes, lessons learned, and shortcomings based on the feedback we've received from the students, instructors, teaching assistants, and partners involved in the first cohort of Careers in Code. We're extremely fortunate to have such an amazing community to help inform many of our decisions. The program **started on March, 11 2019** and ended on **August 22, 2019**.

Feedback Collected

We collected feedback from students, instructors, and teaching assistants on a daily and weekly basis in order to help inform and improve the program. You can view some of the data that was collected here: Students ([daily](#), [weekly](#)), Instructors ([daily](#), [weekly](#)), [Teaching Assistants](#).

Student Outcomes Report

In addition to this report, a [Student Outcomes Report](#) is being published in 30 day intervals reporting data associated with student placement, employment, job search, job and wealth creation, and demographics. You can view the outcomes report [on our website here](#).

Decreasing the Barriers to Entry

In order to minimize as many barriers as possible when it comes to living in poverty, accepted students received a full tuition scholarship, a laptop, a coworking space membership, a student stipend, and a student success representative to help students navigate barriers and hurdles they faced during the program.

To help inform these decisions, we asked our students two things during the screening process:

- Will you require any services for the program? Transportation? Childcare or babysitting services? Anything at all that would help you complete the program?
- What are some challenges that you might have throughout the duration of the program? How can we help address and solve them?

Free Tuition

The average tuition per student to attend a coding bootcamp in the United States is \$11,900. That is much too expensive given our desire to create an inclusive coding bootcamp that will provide opportunities for women and minorities in concentrated areas of extreme poverty. For the Careers in Code bootcamp there is no tuition cost. We treat each student as though they have been admitted on scholarship.

Free 2017 Macbook Pro Laptop

The women and minority applicants accepted into the first cohort were issued personal laptops free of charge that were purchased as a part of our grant funding. These consisted of brand new 2017 MacBook Pros that were given to students during the kickoff ceremony. As long as the individual successfully completed the program and graduated according to our curriculum, they were able to keep the laptop moving forward.

Free Syracuse CoWorks Membership

Careers in Code purchased standard, 24/7 coworking memberships for each student. This provided students with a friendly work environment with Internet access, electricity, snacks, and most importantly, opportunities to network with other software developers and employers who are members. We're fortunate to have [Syracuse CoWorks](#) as an amazing partner in helping to provide space for our students.

Student Stipends

In addition to the other financial assistance mentioned, students were also given up to \$550 in the form of a learning stipend that could be used throughout the program.

Student Success Representative

The Student Success Representative helps our students to navigate and eliminate any potential barriers, challenges, hurdles, or problems they might have throughout the program. They worked closely with our students inside and outside the classroom to ensure their success and support them to the best of their ability. We're determined to have every student that was accepted into our program also graduate. They helped to ensure we meet our goal. You can view [a full description of the role here](#).

Class Duration and Time

The majority of coding bootcamps are fully-immersive and students are enrolled in them full-time. Conversely, operating Careers in Code as a full-time coding bootcamp isn't feasible. We've learned it's unrealistic to believe this demographic of students will be able to pursue the opportunity full-time given their respective job and family obligations. Therefore, our coding bootcamp will continue to operate in the evenings, Monday - Thursday from 5:30pm to 8:30pm, and operate for 24 weeks.

Program Reflection

Admissions and Enrollment Process

Students

For our first cohort we received 44 applications and admitted 12 students (i.e., 27% acceptance rate).

We have a rigorous [admissions process](#) that consists of a few parts. We tested candidates problem solving and critical thinking abilities, baseline aptitude, passion, and grit.

- **Part 1: Written Application.** Students provide some information on their demographics, economic status, goals and motivation, and previous experience. We then used the Census Bureau's income thresholds to determine who classifies as impoverished.
- **Part 2: Prep Work.** Students completed prep work that helped them prepare for the take home technical interview.
- **Part 3: Phone Call.** Candidate interviews with Hack Upstate personnel. Interviews were conducted remotely.
- **Part 4: Data Analysis.** We worked with the City of Syracuse to determine questions around data analysis and assess problem solving abilities to open-ended questions. This was an optional step but we highly encouraged it.

- **Part 5: Take-Home Technical Interview.** We leveraged CodeAcademy to serve as a baseline for the take-home technical interview.

We think the admissions process was a helpful indicator for success among our students. We felt it was challenging but fair, and students were more prepared for the experience during the program.

For our next cohort, we will assess the feedback we've received from our first cohort's admissions process and hope to implement more automated and robust systems for this phase in order to create a more equitable and consistent experience for our applicants.

Instructors and Teaching Assistants

Our instructional staff also went through a comprehensive admissions program that assessed their ability to teach material to our students. Our full instructor and teaching assistant admissions / interview process [is outlined here](#).

- **Part 1: Written application.** Instructors submit preliminary information to us on our website.
- **Part 2: Syllabus review.** Instructors review and provide feedback on our [syllabus](#).
- **Part 3: Phone call with us.** We scheduled a phone call to discuss the following. By the end of this call, we had a good idea of where the instructor fit into the schedule.
 - Discuss our mission of the program
 - Availability
 - Topics instructors would like to teach based on skills and experience
 - Responsibilities and expectations ([instructors](#), [TA's](#))
 - Compensation
- **Part 4: Decision / offer.** After reviewing all the instructors, we will make a decision on your acceptance and a proposed hourly rate.
- **Part 5: First day of Class.** After a decision is made, we expected instructor's assigned weeks on the curriculum to be populated with lesson plans, projects, homework, and any other relevant prep work before the classes begin.

After the interview process for both instructor and teaching assistants, we carefully reviewed where each individual fits into the curriculum based on their experience, skills, and abilities. After formal acceptance, we proposed an initial [schedule](#) / week-over-week module breakdown and iterated upon it throughout the program.

Partnerships

Creating and operating a coding bootcamp that will teach computer programming to women and minorities from distressed communities can't be done alone. It requires long-term, strategic partners who will support the program and benefit from its sustained success. Strategic partners have been instrumental to Hack Upstate over the years.

Our partners have helped support us with financing and a multitude of other services including shared facilities, public relations, accounting, and legal support. These partnerships have enabled us to successfully grow Hack Upstate in a sustainable manner for nearly seven years.

We're extremely fortunate to have so many partners involved in our first cohort of Careers in Code that were critical to our success.

Onondaga County and the Alliance For Economic Inclusion

The AEI is comprised of a group of 24 community leaders from each of the five counties selected to represent the diversity of governments, businesses, schools and communities. The AEI is being funded through the successful CNY Rising Upstate Revitalization Initiative plan submitted by the Central New York Regional Economic Development Council,

which was tasked with addressing poverty in Cayuga, Cortland, Madison, Oswego and Onondaga Counties. Estimates based on 2016 population data show 14.9% or 112,020 of Central New York residents live in poverty. The poverty rate is significantly higher in more populated centers such as the City of Syracuse.¹

Onondaga County and the AEI allowed us to ultimately finance, organize, and execute the first cohort of Careers in Code. We're eternally thankful for their support.

The Technology Garden and CenterState CEO

We've been fortunate to partner with The Technology Garden, a program of CenterState CEO, over the past 6 years as a place to host our weekend long hackathons.

For our first cohort, The Tech Garden generously provided us with a classroom space to host our classes. The venue is located in the heart of downtown Syracuse and enabled accessibility to students living within the city with a bus station located closeby. The venue was also just a few blocks away from Syracuse CoWorks, where [local developer meetups](#) are hosted.

We thank The Tech Garden and CenterState CEO for providing us the space to allow our students to grow into software developers. A very special thank you to Beverly Mack, who helped us to coordinate the space for classes and our events.

Syracuse CoWorks

Careers in Code purchased standard, 24/7 coworking memberships for each student. This provided students with a friendly work environment with Internet access, electricity, snacks, and most importantly, opportunities to network with other software developers and employers who are members. Students would also use the space to host study groups on the weekend, collaborating with each other on classwork. We're fortunate to have [Syracuse CoWorks](#) as an amazing partner in helping to provide space for our students.

Local Employers

We're thrilled to have local CNY employers involved in our program. In particular, we're extremely fortunate for the following employer's support:

- **TCGplayer.** We had a handful of guest speakers join from TCGplayer share their experiences with our students.
- **Raymour & Flanigan.** Matt and Ralph from Raymour and Flanningan dedicated several hours of their day to give mock interviews to all of our students.
- **Metis Consulting Group.** Provided instrumental feedback to our program and helped to provide food and refreshments at our kickoff and capstone projects.

These companies also provided our students with valuable connections and helped to boost their confidence throughout the program. Ultimately, local employer involvement is critical to the success of our program.

We are hoping to explore a sustainable model with employers and provide them with a pipeline of talent and help however we can with their immediate hiring needs.

Soft Skill Development

Developing students' skills outside of their technical abilities was an integral piece of Careers in Code.

¹ <https://www.urbancny.com/county-executive-mcmahon-announces-second-round-of-the-alliance-for-economic-inclusion/>
Hack Upstate's Careers in Code - Transparency Report - Cohort 1 (2019 - 2020)

Networking Events / Local Developer Meetups

Throughout the course of the program, we organized several networking events for our students. We would often dedicate Tuesday's class to attend developer meetups to get involved in the local tech community. Our students interacted with local technologists and helped to improve their communication skills, facilitate connections, and potential employment opportunities.

We think these events helped our students become more confident in their abilities. Additionally, we at Hack Upstate support many local developer meetups [you can read about here](#).

Our students are involved in some of these local meetups and events:

- [OpenHack](#). A casual meetup based around developer side-projects. OpenHack Syracuse happens on the second Tuesday of every month at Syracuse Coworks
- [Syracuse Javascript Meetup](#). Each event has a learning and interactive portion. Whether you're an experienced JavaScript programmer or just getting started, we welcome and encourage all proficiency levels. They meet on the third Tuesday of each month
- [Women in Coding](#). Monthly workshops that give people a chance to work on a project or work through an online curriculum at their own pace. Each workshop will have at least one mentor to provide support and answer questions. Although this group is geared toward women, anyone is welcome to attend our classes
- [Code for Syracuse](#). A group of volunteers that builds digital tools with government and non-profit partners to enhance public life and bridge the digital gap. We're a platform for civic innovation, driven by civic engagement within the Greater Syracuse community.
- Happy Hour upon completion of the program.

We also hosted a professional headshot day on August 14, 2019 where students received photographs from [Von Langen Studios, LLC](#).

After the program, students attended:

- [Google Developer Group Capital Region Devfest](#). Students were exposed to Albany's tech community and learned about machine learning, IoT, Flutter and so on. Our intern, Will Guisbond, also [gave a talk](#) on Careers in Code during this event.
- [Women in Machine Learning and Data Science Events](#). WiMLDS's mission is to support and promote women and gender minorities who are practicing, studying or are interested in the fields of machine learning and data science. We create opportunities for members to engage in technical and professional conversations in a positive, supportive environment by hosting talks by women and gender minority individuals working in data science or machine learning. Events include technical workshops, networking events and hackathons. We are inclusive to anyone who supports our cause regardless of gender identity or technical background.

Some other initiatives our students are involved in after the program:

- [MLH Local Hack Day](#). Organized by graduate Dana McMullen and TA Jennifer Tran, MLH's technology learning day conference is a global conference that allows the community to pick up new skills by experiencing a professional day of learning first-hand. Over the course of the day attendees will participate in a series of workshops where they'll learn skills such as publishing their first website using AWS, sending their first SMS with Twilio, Blockchain, building their first game in Unity and more.
- [Salt City Code](#). A podcast was started by graduates Kelly Corey and Karin Thorne. They talk about their experiences as bootcamp students.

We're excited to find more opportunities to grow student's soft skills through additional events. We'd also plan to host a career fair day and employer roundtable for future cohorts.

Guest Speakers

We hosted guest speakers and invited them to join us before class as well as at our networking events. They shared their experiences working in the industry and provided insight into how students can be successful. More importantly, they inspired students, provided encouragement, and demonstrated what goes into becoming a successful software developer. For our first cohort we were fortunate to be joined by seventeen exceptional guest speakers who you can learn more about [here](#).

In the future, we would also like to create more communication and systems to facilitate guest speakers. We found that talks ranging more than 30-45 minutes, while valuable, sometimes did not leave enough time for class content.

Mock Interviews

Raymour and Flannigan contributed several hours from their schedules to conduct mock interviews with all of our students. Matt Checksfield and Ralph Divito joined us on the evening of May 23, 2019 conduct the interviews and gave immensely valuable feedback to our students. Students said *"The feedback from the interview and resume was really helpful! It was amazing for Matt and Ralph to take the time to do this and it's appreciated."* and *"It was VERY helpful as a process and I have a lot to think about and a lot of work to do"*.

Community Support and Feedback

The first cohort of Careers in Code would not be possible without the incredible support of our community network. We were fortunate to have an amazing group of students, staff, instructors, teaching assistants, partners, and many other individuals who devoted their time to the success of our students.

Students

Our first cohort of students has dedicated countless hours both inside and outside the classroom working on classwork, homework, projects, and their capstone projects. They've had to make tremendous sacrifice for the program in order to be successful. They've provided us with feedback that has helped us tremendously to improve. We'd actively review feedback submitted and do our best to implement it within 1-2 weeks. [You can learn more about our students here](#).

Instructors and Teaching Assistants

We were fortunate to have a total of 10 instructors and 8 teaching assistants involved in the first cohort of Careers in Code. They consisted of professors, engineers, designers, entrepreneurs, and leaders in the local CNY technology community. Our instructors and teaching assistants dedicated a lot of time providing feedback to help inform the program, creating classroom content, and ultimately supporting our students both inside and outside of the classroom. Many of our instructors also opened their calendars to [setup 1-1 time with our students](#). You can learn more [about our instructors here](#) and [our teaching assistants here](#). In the future, we hope to expand our instructional staff by hiring more women and minority individuals who best reflect the mission of this program.

Over the 24 weeks, we created systems and practices to best facilitate communication and instructor involvement. Going forward, we want to better implement and integrate these systems. For example, we provided weekly information and updates via Slack to our instructors on where the students were at week-over-week. We hope to provide some system to automate the process.

We also facilitated weekly instructor handoff meetings (i.e. a 30 minute video conference call) to coordinate transitions, but it did not become fully implemented until ~5 weeks into the program. We would like to expand these systems to our teaching assistants, further promoting their involvement and encouraging more collaboration between them. We also plan to host a formal orientation, further exploring ways to facilitate communication and automate instructor systems.

We are incredibly grateful for the support of our community. We are looking forward to finding ways to get them further involved as we scale.

Careers in Code Staff

We have a small team that allows us to move quickly. The two partners of Hack Upstate are Jesse Peplinski and Doug Crescenzi.

We've also been extremely fortunate to bring on an intern, Will Guisbond, who has been tremendously helpful in the day-to-day operations of the program. We also hired a Student Success Representative, Jason Scharf, who helps our students navigate problems and challenges they face during the program. Our team has been instrumental to our program's success. [You can learn more about our team here.](#)

Capstone Project

Over the duration of the program, students created an individual capstone project on something they are passionate about. The project was a full-stack (front-end, back-end, database) application that was built throughout the 24 weeks of the program. Students also discussed problems they are solving through touchpoints and demo days. We think the capstone experience was a key part of the program, as it allowed our students to solidify their knowledge throughout the 24 weeks of the program into a real-world project. [You can view the full capstone project requirements here.](#)

During the first week, students chose a project idea that might be of interest to them. Many students worked through multiple iterations. We provided several resources for helping students create their MVP.

Students had several deliverables to complete as part of their capstone project including:

- **Touch points.** The program manager asked each student for a status update, ideas, thoughts, questions, or concerns on their capstone projects. Each student spoke for approximately 2-3 minutes. We think this helped students become comfortable talking about their project and to see where their peers were at.
- **Demo days.** Every ~8 weeks, students plugged in their computers into the projector and share what they've built thus far.
- **Technical blog posts.** We encourage students to write about the progress of their projects through technical blog posts. However, this was a loose requirement.
- **Final presentation.** At the end of the 24 weeks, all of our students presented their final project. This helped boost the confidence of our students and get more comfortable with public speaking. [You can view the presentations here.](#)

We've received feedback on the value that the capstone project added to the program. Students have a real, tangible project to add to their portfolios that they can confidently talk about during interviews. However, we do recognize that it was tremendously challenging for some students to balance their full-time jobs, classwork, and a capstone project. The capstone project required tremendous sacrifice that exemplifies their hard work and dedication to learn and apply their skills they've learned.

As a result, we have several lessons learned through our short-comings. We struggled with providing our students with guidance for the capstone project. We initially thought that the role of the instructors and program managers should be relatively hands off, but we quickly realized that students needed more structure. Learning to code and managing a project are two complex topics that many students were seeing for the first time.

Students worked on a basic Agile homework assignment and we provided students with [an Agile template trello board](#), but based on the feedback we received, we needed to do more. We provided [resources](#) and [details](#) on where students should be at week over week in their projects a few weeks into the program. [Instructors opened up their calendars](#) for 1-1 pair programming time, but we didn't implement this until several weeks into the program.

In the future, we hope to improve the capstone experience by creating better systems to facilitate the process. We hope to have a more detailed schedule, facilitate 1-1 and pair programming time sooner, automate student check-ins for self-assessment, formalize mentorship, and find ways to increase student's public speaking ability.

Curriculum

For our first cohort, we created a custom [curriculum](#) by [soliciting feedback](#) from local employers and instructors. Their feedback as well as their hiring needs were used to inform the curriculum's content as well as its structure. Our instructors first begin with content that introduced students to HTML, CSS, and JavaScript, and then guided them through project assignments that are fueled by current market demands. We will continue to iterate upon and refine our curriculum each year and ensure it is tailored around the unique needs of our partners and local Central New York companies.

Our curriculum consisted of many modules that contained often spanned over multiple weeks. We focused on teaching the fundamentals of programming throughout the 24 weeks using a full-stack Javascript curriculum and leveraging [Eloquent Javascript](#) and [FreeCodeCamp](#) to name a few. Our instructors dove into specific and frameworks as the program progressed. Having instructors that were employed within the industry proved instrumental to the success of our curriculum, as they were familiar with or working with the technology.

One of our biggest struggles with the first version of the curriculum was the overall structure and order of the modules. Our students told us they didn't have enough time to integrate these concepts into their capstone projects. For example: React was introduced to the students in the final weeks of the class, and many students were scrambling to tie up what they just learned and integrate it into the capstone.

Given how we taught so many different technologies in class, we didn't standardize on a tech stack for the class which became a pain-point for classroom instruction and the capstone project. Eventually, we decided on the SERN (SQL, Express, React, Node) stack, but we need to give more thought into what makes the most sense for the class after facilitating additional feedback.

In the future, we will issue another local employer survey and work more closely with them to identify their needs and what we should teach. We also plan to restructure the order of the modules for a more coherent experience. Given the prominence of .NET among Central and Upstate NY employers, we hope to figure out a way to fit .NET into the curriculum.

We also encouraged instructors to be prepared for class at least 2-3 weeks ahead of time. We found that those who prepped with enough lead time had the most success in the classroom. We're hoping to create systems that better allows for our instructors to develop materials ahead of time such as more concrete checklists of before / during / after class, harder deadlines, focus groups, increased collaboration and communication and better reporting mechanisms.

Kickoff and Graduation Ceremonies

Our cohort was initiated with a kickoff ceremony at the Tech Garden on March 7, 2019. Approximately ~100 people attended including students and their families, instructors, teaching assistants, partners, and local employers. All students, instructors, and TA's were given the opportunity to introduce themselves and we held a short orientation immediately following. [You can learn more about the event here.](#)

We concluded the program with capstone project presentations and graduation ceremony on August 22, 2019 at the Tech Garden. This event was also their chance to present their capstone projects and demonstrate what students learned over the 24 weeks. We found there weren't as many local employers present at graduation ceremony compared to the kickoff. We hope to give more notice in the future. You can find the livestream [here](#), and the promotional material [here](#).

Systems, Tools, and Processes

We're extremely process and system driven. Our first cohort was powered on many systems, tools and processes to facilitate workflows, track work more effectively, and increase productivity..

Here are some of the core systems and tools we used:

- [Zoom](#) was used to livestream all of our classes, which were then [published to YouTube](#). The program is designed to be an in person experience, but Zoom allowed for remote classes from time to time if students were not able to make it to class and when we had a remote instructor host the classroom, Jake Beard. You can learn more about our [remote week here](#).
- [Slack](#) was used for asynchronous communication between students, instructors, and staff. Slack also allowed our students to communicate and collaborate with each other and instructors outside of the classroom.
- [Google Classroom](#) was used as a CMS (Classroom Management System). Instructors could post classroom content (i.e. material, assignments, homework, quizzes, resources). However, as the program progressed, we found the LMS became less utilized for day-to-day class time. We plan to explore additional options around CMS's in the future.
- [Trello](#) was used to track and manage day-to-day work. We had several boards for various phases including general operations, student admissions, instructor admissions, guest lecturer coordination, etc. Moving forward, we are exploring ways to facilitate additional processes in Trello and make boards more effective.
- [The Google Suite](#) and Google Drive was used for everything related document editing and sharing.
- [Google Forms](#) was used to administer our daily and weekly feedback forms to instructors, students and TA's. Data submitted from the forms were analyzed in Google Sheets. We also used Google Apps Scripts to create email auto-responders.
- [Airtable](#) was used to handle the application forms for instructors, students, and teaching assistants. In the future we plan to consolidate on one platform for submitting forms.
- [Zapier](#) was used to send automated emails upon Airtable form responses.

Some other tools we found helpful were:

- [Calendly](#) - Facilitating meeting times.
- [Drip](#) - Email marketing and broadcasts.
- Google Spreadsheets and WaveApps - Expenses, accounting, and reporting.
- [Buffer](#) - Social media management.
- [Notion](#) - Document editing.
- [Netlify](#) - Website hosting and deployment.

We are looking forward to exploring additional systems to save us time in the future. In particular, we're exploring:

- Basic automation tools, i.e. [Zapier](#) or [Automate.io](#).
- Process automation, i.e. [Process Street](#).
- Payroll and HR Facilitation, i.e. [Gusto](#), [WaveApps](#), or [Zenefits](#).
- Email Marketing Automation, i.e. [MixMax](#), [Boomerang](#), or [ConvertKit](#)
- Learning Management Systems. i.e. [CanvasLMS](#)

Student Success Representative

The student success representative helped students navigate and eliminate any potential barriers or challenges they might have had throughout the program.

The key responsibilities of the student success representative included:

- Attend classes at least once a week for an hour to inform students that they are available to support them
- Email and send a message periodically to inform students that you are available to support them
- Check in with each student at least every two weeks

- Check in frequently with students that are not meeting Key Performance Indicators (KPI's)
- Submit a weekly progress report and hold a weekly meeting with the program manager to discuss the progress of each student
- Be available on different mediums including (but not limited to): in person (coffee, lunch, before or after class, etc), emails, phone calls, Zoom calls, etc
- Actively review feedback surveys (student, instructor, TA's) to assess the progress of the students

[You can find the full list of responsibilities here.](#)

We were fortunate to bring on Jason Scharf, a child protective caseworker for Onondaga County, for this position. He met students at class, at Syracuse CoWorks, spoke with them on the phone, and messaged them during the program to check in and try to help with concerns as they came up. He helped students through issues including a family member passing away, personal health issues, car trouble, and housing. Jason would often be found working individually with students as they navigated different challenges, as well as sitting in on classes to show his availability and visibility to students directly.

Students shared the following from a post-program survey on Jason's role: "The interactions I had with Jason were consistently motivating and helpful. There were several instances throughout the program when I didn't think I could perform, and I felt like I could be honest with him." Another student shared "I always knew Jason would be there to provide support (moral or otherwise) or assistance. And he was always a friendly, reassuring presence."

During the program, the Student Success Coordinator had contact with the students (either in person, phone, or text) 109 times, which for each student was an average of 10 check ins over the program. In the follow up survey, 86% of students felt that check ins were frequent enough.

We hope to retain our student success representative and potentially bring on another individual as class size increases. We're also exploring the possibility of bringing on a Career Coach, an individual who ensures that all of our students are prepared to enter their job search with confidence and competence. [You can view a tentative job description here.](#)

What's Next?

Since day one, our mission has been to unite and facilitate collaboration among the greater Upstate New York technology community. To date, we've built a growing network comprised of thousands of Upstate New York technologists and we have facilitated dozens of job placements. Launching Careers in Code in the spring of 2019 has enabled us to take our efforts to the next level.

We're incredibly fortunate to have organized the first cohort of Careers in Code. We're learned so many lessons from our students, instructors, teaching assistants, and partners. We're grateful to have their open and honest feedback to help inform and improve the program.

Careers in Code has already generated profoundly rich and life changing opportunities for women and minorities from Central New York's un- and underemployed. Not only that, it has helped to offset the current talent shortage our region faces when it comes to hiring software developers and engineers. **We're excited to find ways to scale Careers in Code and train even more individuals.**

Thank You

Thank you for taking the time to read our transparency report. If you have feedback, questions, or are interested in learning more about Careers in Code, reach out to us at team@hackupstate.com.



A handwritten signature of Doug Crescenzi in black ink.

Doug Crescenzi
Founder, Partner
doug@hackupstate.com



A handwritten signature of Jesse Peplinski in black ink.

Jesse Peplinski
Partner
jesse@hackupstate.com