By Kristin Luciani   Mar 06, 2014

Coding for a Cause

UC San Diego student entrepreneur wins $10,000 Microsoft award to develop app for social change
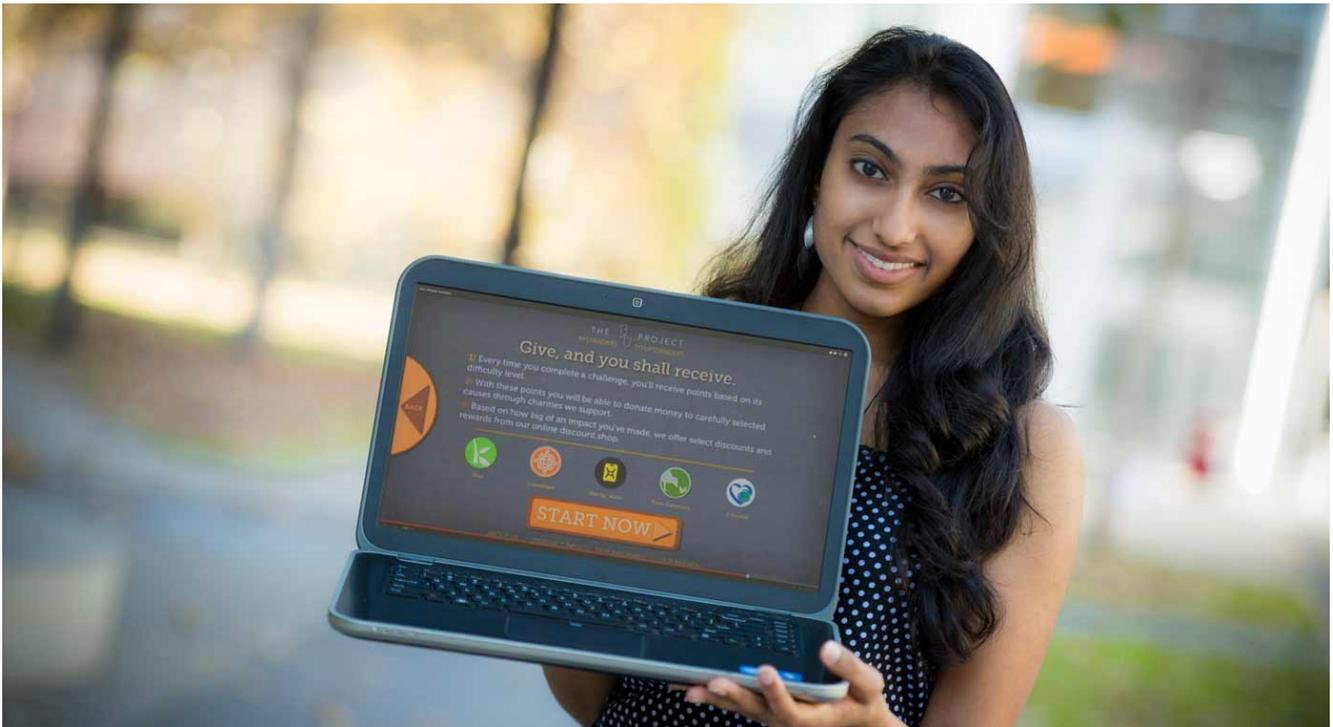
*Photo by Erik Jepsen/UC San Diego Publications*

Sneha Jayaprakash, a sophomore at UC San Diego, is passionate about two things: computer science and social change. As part of the 2013 Microsoft YouthSpark Challenge for Change contest, she developed a winning proposal for a mobile app to engage students with volunteerism and social issues—and received a prize of $2,500 to get the project going. Now, with an additional $10,000 awarded by the Microsoft Imagine Fund last month, Jayaprakash is getting the opportunity to turn her idea into a successful startup.

Named Bystanders to Upstanders (B2U), Jayaprakash's app presents simple, service-related challenges for users to complete in order to earn rewards. The challenges are personalized to the interests and skills of the participant. In addition, users can compete with their friends and use their earned points to make real donations to a variety of nonprofits.

"I've always been passionate about global issues," said Jayaprakash. "I wanted to show people that volunteer service is easy. You don't have to go overseas or make a big commitment. There are simple things you can do every day to make a difference."

Jayaprakash was selected as a winner of the Microsoft YouthSpark Challenge for Change contest from an entry pool of hundreds of university students. The contest asked students to choose a cause and come up with an idea to address it using Windows and Microsoft Office. As one of five winners, Jayaprakash received a $2,500 award to help fund her project, as well as a free tablet, cell phone and an expense-paid volunteer trip to Kenya.

Jayaprakash recruited six of her friends—also computer science majors—to help design and build Bystanders to Upstanders. The contest award enabled them to buy server space, a domain name, developer software and other technical infrastructure to bring the project to life. Later, an additional five students would join the project, from different fields of study ranging from visual arts to management science.
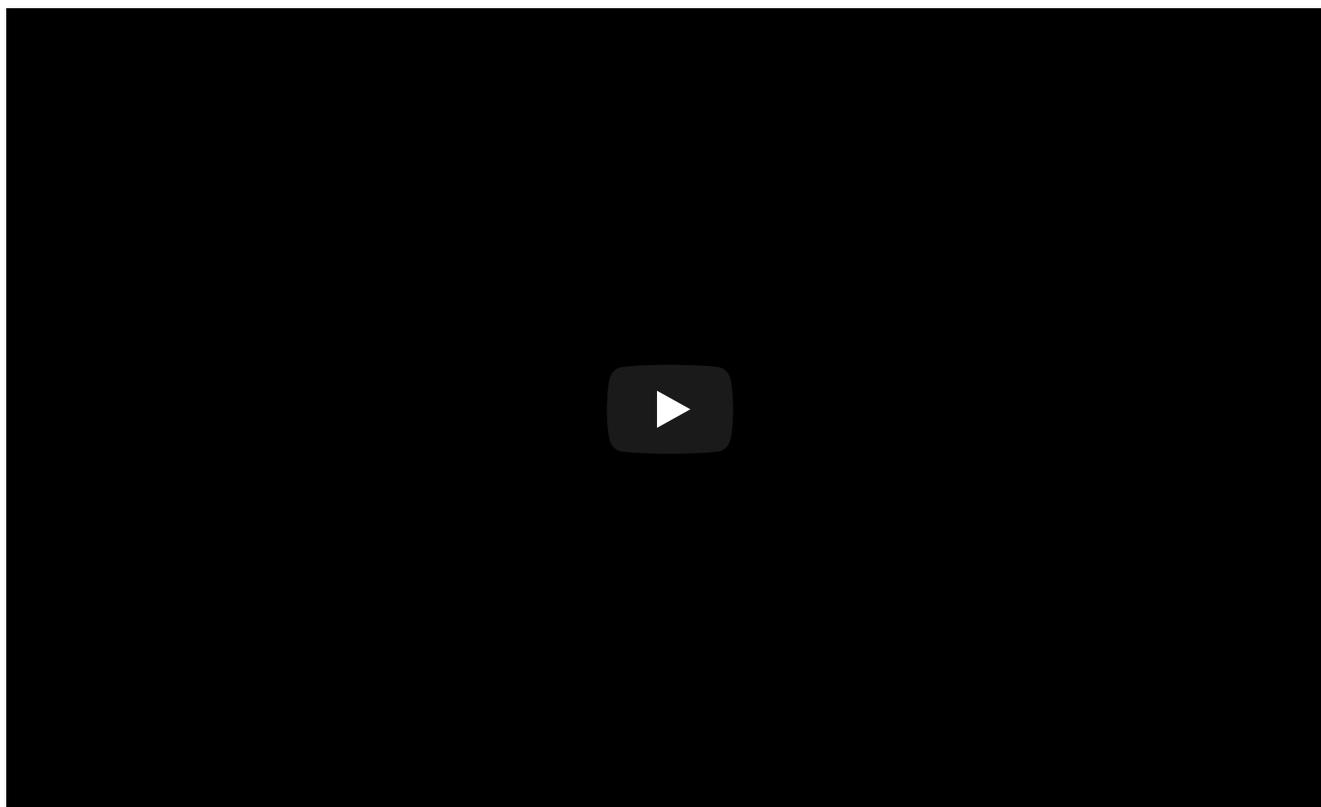
"I thought, 'this is something unique we can do with our computer science education,'" said Jayaprakash. "Most people don't associate computer science with social activism."

Winnie Xu, also a computer science student working on B2U, agrees. "To be able to take what I'm learning in class and apply it to something I'm passionate about is really gratifying."

The students spent the summer of 2013 researching how to design and build B2U, including the potential competition, as well as flushing out their concept and goals for the technology. In the fall, they participated in a hack-a-thon to get the coding done for an initial version of the app. They've also been testing potential service challenges with their UC San Diego peers, ranging from recycling competitions to random acts of kindness.

The challenge of building a real-world product has also helped the students to understand how computer science overlaps with other fields when outside of the classroom, explained Xu. "At first, I thought building an app was just a matter of coding, like we do in class," she said. "But there's so much more to it. I'm learning about the business side of it, and trying to understand the behavior of the audience we're trying to reach. One of the biggest things I've learned so far is that it's okay to fail and try again."

The recent award from the Microsoft Imagine Fund will help Jayaprakash and her team to launch their product as a sustainable enterprise. In addition to the $10,000, the award includes a 10-week startup training program to learn how to build a business around their technology, with support from seasoned entrepreneurs and Microsoft technical mentors. The students' goal is to launch a test version of the product before the end of the academic year.

"I've always had many strong opinions on what could be done to make the world a better place, and now, for the first time, I have all of the resources that I need to follow through with my vision," said Jayaprakash. "As time-consuming and chaotic as it is to get this organization set up while still balancing work, classes and research, not a day goes by that I am not thankful for this incredible opportunity to pursue what I love."

In Kenya

As part of her prize package from the Microsoft YouthSpark Challenge for Change Contest, Jayaprakash traveled to Kenya last summer for a three-week service learning trip hosted by the nonprofit Free the Children. Jayaprakash and the other winners stayed in Mwangaza, a community of about 2,600 people in the Narok district.

Jayaprakash described the trip as one of the most incredible experience of her life. "The most important thing I learned on our trip is that you don't have to be an adult to participate in social change," she said. "There are really passionate youth out there, and there are opportunities for them to be involved. You can start from any age."

The Kenya trip was equal parts education and service. The contest winners volunteered at a build site where a schoolroom was under construction, visited local high schools and got to know the community and culture. They also participated in leadership workshops and received assistance in creating action plans for their projects.

Working with the fellow Microsoft winners and local high school students, Jayaprakash also learned about the different motivations and goals that drive people to volunteer and work toward social change—ideas she is currently incorporating into the development of B2U.

Computer Science Convert

Jayaprakash is a Jacobs Scholar at the Jacobs School of Engineering at UC San Diego. The scholars are selected for their academic achievements, leadership potential and commitment to community service. She received a scholarship that includes full tuition and living expenses, invitation to cultural and other social events and access to a network of current and former Jacobs Scholars.

Jayaprakash said that before coming to college, she "hated the idea of computer science."

"I had the stereotype of the person working in front of a computer screen all day, with no life." Jayaprakash started at UC San Diego as a bioengineering major, which required her to take a Java class. That class changed her mind. She quickly switched her major to computer science with an emphasis on bioinformatics.

Jayaprakash recalls that as a kid, she was not interested in Barbie dolls like other girls her age. She loved Legos and puzzle-like games. "Computer science is like a puzzle. It's about using reason and logic to solve problems," she says. "I think if you give girls more hands-on experiences at a young age, they will be more receptive and even excited about computer science."

This summer, Jayaprakash will be interning with Microsoft through their Explore Microsoft Program. Her internship will incorporate rotations through three areas of computer science: testing, development and project management. Though she isn't sure exactly what kind of career she will pursue after graduating from UC San Diego, Jayaprakash knows she will find a way to put her computer science skills to work for social change.

Keep up with campus news by subscribing to *This Week @ UC San Diego*