

NEWS/MEDIA

Home (/) » News/Media (/news-and-media)

Inspiring future programmers

📅 Oct 31, 2018

👤 Allie Arp, CSL

(<https://www.addtoany.com/share#url=future-programmers&title=Inspiring%20future-programmers>)
 (/#linkedin) (/#pinterest) (/#google_plus) (/#twitter) (/#facebook)



Today’s kids may be digital natives, but Sibin Mohan, Research Assistant Professor in CSL, the department of Computer Science and the Information Trust Institute, and his students wanted to introduce them to the technology behind computers. For the last two semesters, Mohan and his doctoral students Chien-Ying Chen and Monowar Hasan have taught Urbana middle school students the basics of computer programming. Sayan Mitra, Professor of Electrical and Computer Engineering and his students, Ritwika Ghosh and Hussein Sibae, also participated in this program during the second semester.

The content Mohan and his students used was taken from curriculum developed by the University of Illinois at Urbana-Champaign’s Computer Science (CS) professors. They use a visual programming language that is aimed at teaching kids, called “Scratch”, developed by the Massachusetts Institute of Technology. After a short lecture explaining the assignment, Chen and Hasan would give the students lab assignments, with most of them excelling.

“These kids were super smart,” Mohan said. “It’s great to see them interested in computer science and programming.”

In addition to their intelligence, Mohan was also impressed at the diversity of the group. The first class, in the fall of 2017, had 40 percent girls and there were kids from all different racial backgrounds who signed up for the twice-a-week class.

The teaching sessions were also a good opportunity for Chen and Hasan to get teaching experience.



(/sites/default/files/images/sibinmohan.jpg)
Sibin Mohan

“It’s an age where you’re not thinking of careers, but even if they don’t become programmers, it will definitely shape what they do.”

Sibin Mohan, CSL Research Assistant Professor



Sibin Mohan
 (/directory/profile/sibin)
 Research Assistant Professor
 (217) 300-3037
 sibin@illinois.edu
 (mailto:sibin@illinois.edu)

“This was a lesson in how to teach middle school kids and keep their attention, especially when they’re this smart,” said Chen. “It’s just a great learning experience on how to craft material and keep students engaged at different age levels.”

Chen and Hasan had to work to keep the kids interested. When one student wanted to play Mario instead of working on the assignments, Chen, Hasan and Mohan showed him where he could change the computer code to make Mario jump higher or run faster. Some of the students had already mastered the lessons they were teaching and were building their own games or working in the more advanced Python language.

~~“Our plan was to give them a flavor of computer science to get them interested, but some were already very~~
 advanced,” said Hasan. “In the future, we could design a program and let them do their own coding. I think they would do a really good job.”

Even if not all of the students become computer scientists, Mohan still considers the class a success.

“It’s an age where you’re not thinking of careers, these kids were interested in learning programming and making the computers do what they want,” Mohan said. “I could see their excitement. Even if they don’t become programmers, even if it’s not their career, it will definitely shape what they do.”

Jana Sebestik, a curriculum specialist at the Office of Math, Science and Technology Education (MSTE) at the University of Illinois, was instrumental in making the connections with the Urbana Middle school as well as sourcing the class material. The entire effort for this programming class is part of outreach activities funded by a grant of the National Science Foundation (NSF).



(/sites/default/files/images/ums_scratch: Scratch software used by Mohan and his students.

University of Illinois at Urbana-Champaign
 CSL Building
 1308 W Main Street
 Urbana, IL 61801-2307, USA
 217-333-2511

Copyright 2018 The Board of Trustees
 at the University of Illinois

|

[Cookie Settings](#)

**[ABOUT \(/ABOUT-US\)](#) [NEWS AND MEDIA \(/NEWS-AND-MEDIA\)](#) [EVENTS \(/EVENTS\)](#)
[CONTACT \(/CONTACT-US\)](#) [MY.CSL \(HTTP://MY.CSL.ILLINOIS.EDU\)](#)**

