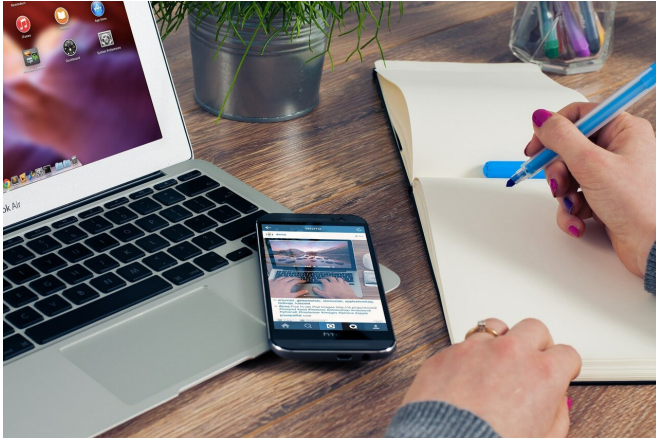


Self-screening technology for COVID-19 symptoms available as open source code

15 June 2020



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Employers across the country can advance reopening efforts with technology developed by the University of Rochester to check employees for potential COVID-19 symptoms before they report to work each day.

Software code at the heart of a "Dr. Chatbot" screening tool, first created for internal use among [health care workers](#) at the University of Rochester Medical Center (URMC), is now available free as [open source software](#). Since April 9, about 9,000 URMC employees have been using the chatbot daily to self-check for COVID-19 symptoms before they report to work. The University's chatbot technology also is the foundation of a "ROC COVID" community screening tool recently launched in thirteen counties in the Finger Lakes, N.Y. region to track potential new outbreaks of COVID-19 cases.

Greater Rochester Chamber of Commerce President and CEO Bob Duffy said, "I commend the University of Rochester for making its Dr. Chatbot software available to the public at no charge. Its use in the ROC COVID health

screening tool is playing a critical role in tracking and slowing the spread of the virus in the Rochester and Finger Lakes region. The platform is incredibly easy to use. It takes me less than five seconds to submit my information every day. The U of R's generous decision to make Dr. Chatbot technology available to employers can go a long way in helping them foster a healthy workforce."

University of Rochester's open source code includes:

- A simple user interface accessible from an employee's smartphone, tablet, PC or other device
- Seven avatars representing a range of friendly onscreen health professionals who conduct the daily symptom checks on a rotating basis
- A survey with questions determined by individual employers. Examples could include potential COVID-19 symptoms such as a fever, [sore throat](#), cough, body aches or loss of taste or smell
- Depending on survey answers, employees receive a green check mark if they are cleared for work or a red "X" requiring other action. Employers will determine the call to action, which could be to call their manager, check with a health professional or get a COVID-19 test
- Daily email or text messages to remind employees to complete the brief survey questions

The technology was developed by the University of Rochester Health Lab, which works to help transform care delivery through the use of smartphone [mobile applications](#), virtual and augmented reality technologies, and the use of artificial intelligence.

"We developed Dr. Chatbot as an efficient way to screen front-line health workers each day and

reduce the potential spread of infection inside our medical center," said Stephen Dewhurst, Ph.D., vice dean for research at the University of Rochester School of Medicine and Dentistry. "Based on tremendous interest in our technology from other universities and employers of all types, we realize that our tool can be beneficial far beyond our institution in fighting the spread of COVID-19. We are giving away our code for free to all employers who can use it as a way of giving back during this health crisis."

Michael Hasselberg, M.S., Ph.D., co-director of the University of Rochester Health Lab, called the screening tool a great success story for the project team led by senior software developer Daniel Hudy.

"Our chatbot technology gives employers an incredibly simple-to-use and convenient front-end solution to help keep their workplaces safe and healthy," said. "It will be especially beneficial in New York state, where Governor Andrew Cuomo requires employers to have a system in place for checking employees' health before they can reopen."

More information: Employers interested in the health care screening technology can freely access the code at [github.com/University-of-Rochester ... ures/EmployeeChatBot](https://github.com/University-of-Rochester/EmployeeChatBot)

Provided by University of Rochester Medical Center

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