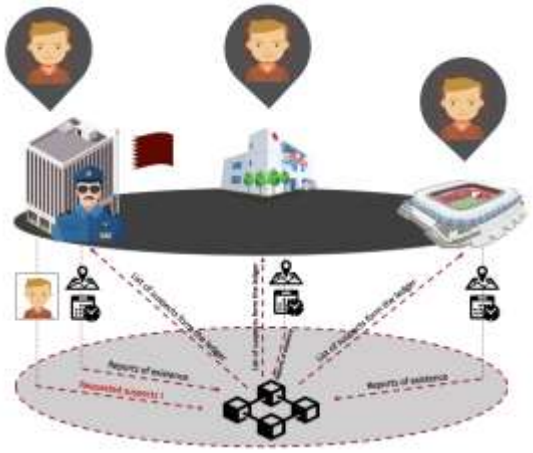
Department newsroom

CSE 2018-2019 Senior Projects Day

The senior project is the capstone project that synthesizes the knowledge and skills that the student developed during the entire academic program at the department. Thus, every year, the department asks the senior students to work for two semesters in teams of 2 to 3 students. These teams then work on development or applied research project requiring significant effort for planning and completion.

At the end of the senior project, the students are required to demonstrate a complete design of their project in the senior project day where they show a working hardware and/or software prototype of their project. The following are some of the senior projects that were presented by the computer science (CS) and computer engineering(CE) students last year and the winner project among them.

RaQeeb: Public Security Surveillance System Using Blockchain Technology and Advanced Image Processing Techniques. The students who worked on the project are Fatima Al-Jabiri - CE, Lina Al-Sahan – CE, Nora Abdelsalam –CE. The project was supervised by Dr. Amr Mohamad. This project leveraged the public security on a national level by eliminating the blind spots of the government visual surveillance systems, with full respect of the private facilities' regulations. The proposed solution assists the specialist authorities in tracking and monitoring criminals and wanted offenders by utilizing the most recent technologies such as Blockchain and Facial recognition. Using these technologies, the students built an integrated system by leveraging intelligent techniques to help the government surveillance requirements. Image processing was applied on surveillance cameras' live footage to recognize the facial features of the pedestrians to detect the target existence. Upon successful detection, the system will then start the tracking and monitoring phase. The target's suspect coordinates and current location data are sent to a monitoring station (governmental system) in a real-time manner. Also, summarized tracking information and events are shared amongst multiple stakeholders using blockchain technology.



The second project is titled Robotic Physiotherapy System for Arm Rehabilitation using Visual Impulsive Stimuli. The students who worked on the project are Menatalla Issa-CE, Roudha Al-Ahbabi-CE, Shimaa Taha (201103366 - CE). The project is supervised by : Dr. Uvais Qidwai