



I-Corps:

Process and application through the eyes of Faculty Member Dr. Muhammad Ahmed

In the spring of 2016, School of Engineering Technology professor Dr. Muhammad Ahmed, participated in the I-Corps workshop to further develop his research for Secured Messaging: Click2Text. The I-Corps workshop is a nationwide, market impact-focused National Science Foundation program for commercializing scientific research that is conducted nationwide.

In the Click2Text project, Dr. Ahmed created a smart-phone application called “iClick” that uses students’ smart phones, instead of clickers, for submission of student responses to questions asked of the class. It was designed as a tool used to increase collaboration within a classroom. In his time with I-Corps, Dr. Ahmed realized that the “app” not only alleviates an expense

for students, it transforms smart phones from an intrusive learning distraction into a helpful learning aid.

Professor Ahmed regularly teaches a New Product Development course to engineering management students and as an elective for supply chain management students.

Each semester, his class divides into teams to develop a new idea (product or service), and bring the idea to reality. To prep students for the semester-long project, he typically hosts an “idea tournament” early on to both foster brain storming, and to drive students to begin evaluating ideas for quality and value using specific criteria.

The I-Corps experience is something Dr. Ahmed wanted to bring to his students.

Graduation

This semester EMU released a record number of doctoral graduates into the world. Twenty-six doctoral students applied for graduation this semester: one in psychology, eight in educational leadership, eight in educational studies, and nine in technology. Previously, the highest number of graduating doctoral students was seventeen in December 2015. Another 426 graduate degree students, and 1,242 undergraduates matriculated. The speaker was Michigan Supreme Court justice, former law professor and dean at the University of Michigan, Bridget McCormick.

Admission

Changes to the graduate application process have begun. The new software, replacing the current system will be called “Apply EMU,” and is slated for release in January of 2017. It was created and will be managed within the university specifically to improve ease of use. With this program, among other changes, evaluators will be able to examine application materials without leaving the program. Software engineers are currently looking into potential glitches to provide a smooth transition to the degree. Please contact Ben Fielder or Ann Richards for questions.

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"The instructors and evaluators at I-Corps grilled me during my idea presentation," Dr. Ahmed said. "It helped me understand that we as scientists and engineers can come up with innovative ideas, products, or services, but if nobody wants them, they are of no use. As an instructor, I now realize that my engineering students need to know and learn this to help them to identify their idea's customer and market segment, which is directly related to success of that idea and the return on their investment."

Dr. Ahmed modified his course to encourage his students to be more cognizant of customer discovery in successful product development, a key concept of the workshop.

"I-Corps taught me that the number one reason why an idea fails is because nobody wants it; so I added a new evaluation question to capture evaluator's willingness to purchase the idea they are evaluating, if that idea were to become a reality," said Dr. Ahmed.

Additional changes to his course included adding value proposition, customer segment, and product-market fit, along with an additional lecture on creating viable and valuable businesses. Changes will

be exercised starting in the Winter 2017 semester.

While the next year will be dedicated to iClick testing, two research papers by, Dr. Ahmed, covering the application's development and the evaluation of student learning and attention while using iClick, respectively, are slated for the future.

The Office of Technology Transfer will be hosting a workshop for Small Business Innovation Research and Small Business Technology Transfer on Thursday, January 19, 2017 from 12:00PM to 1:30PM in 200 Boone Hall.

For additional information, or contact Melinda Marion, Office of Technology Transfer Director. News release:

<https://www.emich.edu/univcomm/releases/release.php?id=1463759501>

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learn science is to be involved in actual scientific research. Therefore, while this research will make important contributions to the body of human understanding (else it would not be genuine research), the primary focus is on the learning opportunities

that it creates for students in two ways.

First, this grant will help to support mentored independent study research. It provides the funds necessary to buy the reagents to allow students to carry out this research, provides travel support to help students go to national conferences to present their findings, provides some scholarship support so that students can focus on doing research instead of working outside jobs, and helps support my time so that I can be an effective research mentor.

Secondly, as part of the grant I am bringing my research into the upper level biochemistry laboratory (CHEM453) by transforming it into a "Course-based Undergraduate Research Experience" (CURE). In this course the students are given an actual research project to work on (the attempt to produce different portions of the Atg11 protein), while at the same time developing their own research ideas in the form of a hypothetical grant proposal. In adopting this format I am following the lead of my biochemistry colleagues in the department, but expanding on their approach and making it relevant to my areas of interest and expertise.



James H. Brickley Endowment for Faculty Professional Development and Innovation

Anthony and Lois Evans have generously established the James H. Brickley Endowment for Faculty Professional Development and Innovation, named after EMU's president from 1974-1978.

Lois Evans is a retired mathematics Teacher. Tony Evans served at EMU in a variety of administrative capacities, and worked with the award's namesake during his time as president.

The \$50,000 endowment has been provided to "facilitate faculty professional development and innovation through a broad range of activities," with an additional \$10,000 gift to create an associated expendable account from which Winter 2017 semester funds will be awarded. The award will be distributed through the Office of the Associate Provost/Associate Vice President for Graduate Studies and Research.

Included activities reassigned time from teaching for scholarly, creative, and innovative endeavor; conference presentations; travel; hiring of research assistants; purchase of special equipment for supplies for teaching, scholarly, research, creative, or innovative ideas; development of a grant proposal for external funding; similar or related academic activities.