

Ying Wu College of Computing

Capstone Program



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NJIT established Ying Wu College of Computing (YWCC) in 2001, reflecting its desire to make computing a centerpiece of its vision for the 21st century. The only college of its kind in New Jersey, YWCC builds on two decades of dedicated computing education and research. It's mission is to teach a broad range of computing disciplines to students on campus and at a distance, to carry out cutting-edge computing research and to work closely with industry. YWCC supports faculty and student innovation and collaborates closely with the local entrepreneurial eco-system growing in leaps and bounds in the New York metro area, aiming for a broad impact inside and outside the campus.

About the YWCC Capstone Program

The Capstone Project is a requirement for all undergraduate students in computer science, information technology and information systems, and an elective for all graduate students. The students work on a software project posed by a company – the Capstone Sponsor – affording them the opportunity to work on a real-work problem and develop professional relationships outside the campus

▶ **Capstone Project proposals may be submitted ywccapstone.com**



The Capstone Advantage

The Capstone affords the Sponsor the following benefits:

- Capstone generates useful software prototypes or proofs-of-concept at no cost to the Sponsor.
- Sponsors can develop professional relationships with talented students for possible recruiting opportunities.
- Capstone provides visibility to company products when demonstrated at the Capstone Showcase and through the College's public relations efforts.
- Sponsors enjoy opportunities to meet and develop strategic partnerships with other Sponsors.



Calendar of Activities and Milestone Events

The Company Representative is a partner, mentor and coach, conducting weekly communication and bi-weekly face-to-face meetings with our students. In addition, the Company Representative is expected to attend the following Capstone Program milestone events:

- Open House (mandatory attendance for all Sponsors, on NJIT campus)
- Project Scope & Outline Presentations (scheduled at the convenience of Capstone Students and Company Representatives)
- First Prototype Presentations (scheduled at the convenience of Capstone Students and Company Representatives)
- Midterm Presentations (mandatory attendance for all Sponsors, on NJIT campus)
- Second Prototype Presentations (scheduled at the convenience of Capstone Students and Company Representatives)
- Capstone Showcase & Final Presentations (mandatory attendance for all Sponsors, on NJIT campus)
- QA Phase (scheduled at the convenience of Capstone Students and Company Representatives)



Proprietary Information

Capstone Students are instructed to respect the confidential nature of all proprietary information made available to them through the Capstone Program. Company Representatives are responsible to disclose relevant information and clearly identify it as propriety. They are also responsible to review Capstone Student presentations to make sure proprietary information is not made public. All Capstone Student inventions resulting from the Capstone Project, including data and software, that are intrinsic to — and derived from — a Capstone Sponsor's proprietary information shall belong solely (100%) to the Capstone Sponsor.

If, during the course of the Capstone Project, a Capstone Student and/or the Capstone Instructor invents technology that is non-intrinsic to nor derived from a Capstone Sponsor's propriety information, the intellectual property rights to the technology shall belong exclusively to NJIT in accordance with NJIT's official Intellectual Property Policy. If the Company Representative participated in the invention, the intellectual property rights to the technology shall be shared (50%/50%) by the Capstone Sponsor and NJIT.

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For more information, contact:
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Capstone Projects

These are examples of Capstone Projects done by YWCC students:

Verizon

The goal of this project was to develop applications to highlight the benefits of Verizon's 5G network. The students created a video application designed to monitor stove activity in the homes of those suffering from Alzheimer's disease to assist caregivers and family members prevent accidents and injuries.

Forbes

This project applied machine learning techniques to better understand the factors that influence an article's appeal to readers, which can then be used to inform business and editorial decisions at the pre-publication stage. The team focused on intrinsic properties of articles, such as the headline, metadata, subject matter, vocabulary, writing style, accompanying media and publication time.

UPS

This project used Azure machine learning and a set of models to accurately predict the resource usage and response times for a set of UPS transactions. The transaction studied were those with very high workload volumes executed on a large number of servers, so any optimization of this process can result in significant savings to the company.

