THE STUDENT-FIRST CAPSTONE

CAPSTONE IN MOTION

YOU'RE INVITED / CAPSTONE SHOWCASE / DECEMBER 5 P. 24 →

THE FIRST EDITION



ONE COURSE. AN ENTIRE ENTERPRISE.

NJIT Capstone has launched new courses and programs and built an enterprise run by students, for students. Students teach as peer professors, serve as Scrum Masters, lead as executives and strategic managers, prepare for network engineering certification, and build their own businesses.

Teams of full-stack problem solvers have built complete products in three months.
Fortune 500 companies use solutions our students developed.

Industry partnerships are one tool we use to empower students. This first edition takes you inside the design and shows the evidence in what students teach, lead and build.

EXPLORE THE CAPSTONE WORKFLOW / p. 02

Purpose / Prepare / Build / Connect / Showcase / Extend

AWARDS & RECOGNITION / p. 07 →

HOW CAPSTONE WORKS

THE MISSION

Put students first. Give them the support and responsibility to solve real problems, lead teams, and teach one another.

THE VISION

Build an enterprise run by students for students, where full-stack problem solvers can carry their learning into careers and communities.

TRANSFORMING THE TRANSFORMATION

Experiential learning can transform education. Our next-generation Capstone re-engineers the experience itself. Through creative teaching methods, students take ownership, build social intelligence, and see why their work matters. That relevance makes learning exciting and gives students the drive to go further.

01 / PURPOSE 03–07

Start with the student

See the mission, the student-first ecosystem, the principles behind it, and nearly 25 years of results.

AWARDS & RECOGNITION / P. 07

02 / PREPARE 08–10

Practice before the stakes rise

Follow the simulation workshop, industry Open House, project management training, PC building, and networking practice.

03 / BUILD 11–13

Turn project work into evidence

See the app gallery, how THE PULSE captures progress, and what Fall 2026 teams are delivering for industry partners.

04 / CONNECT 14–16

Work with people beyond the team

Meet the alumni, industry partners, and wider community that support students during and after Capstone.

05 / SHOWCASE 17–21

Present the work. Recognize the people.

Follow the showcase stories, spring and summer results, and recognition for student achievement.

DECEMBER 5 SHOWCASE INVITATION / P. 24

06 / EXTEND 22–23

Take the model beyond Capstone

Trace the approach from NJIT to New Jersey schools and Colombia, then see what comes next.

IMAGINE / THE STUDENT-FIRST ECOSYSTEM

IMAGINE WHAT YOU CAN BECOME.

STUDENT CHOICE

Company solutions / startups / software / networks / coaching / R&D

ENTERPRISE SIMULATION

Executive leadership / projectized teams / running the enterprise itself

BUILD + RUN + IMPROVE

Real-world scenarios across the enterprise. MDDDE: Manage / Define / Design / Develop / Evaluate. Agile sprints connect team decisions, delivery, tests and feedback.

ALUMNI + MENTORSHIP

Alumni advisors / mentors / sponsors / judges / partners, alongside faculty, PMs, peers and coaches.

CONNECTED AUTOMATION

Course guidance / placement / daily and weekly tracking / individual support / training and bootcamps.

FULL-STACK PROBLEM SOLVER

Beyond the full-stack engineer: technical, strategic and human capabilities.

I / Innovate. M / Make learning practical. A / Apply. G / Grow. I / Inspire confidence.
N / Navigate career paths. E / Emerge with a portfolio, purpose and momentum.

WHY OUR CAPSTONE IS UNLIKE ANY OTHER / PART 1

STUDENTS FIRST.
WITHOUT COMPROMISE.

01 / DOES YOUR CAPSTONE...

Put the student first. Every time?

This is a student-first program. Every partnership, project, platform and support decision begins with one purpose: empowering students' education, growth and future. Students are the reason the system exists.

02 / DOES YOUR CAPSTONE...

Match every dream with a path to pursue it?

Start a company. Build. Teach. Research. Lead a team - or lead the leaders. Ever-expanding possibilities put every student dream, interest and ambition at the center.

03 / DOES YOUR CAPSTONE...

Employ the employer to empower student education?

We recruit industry expertise to serve students. Employers become educational partners, advisors and mentors, bringing real challenges that empower student creativity, strategic thinking and opportunity.

04 / DOES YOUR CAPSTONE...

Build a full-stack problem solver?

A holistic learning experience that builds a full-stack problem solver - beyond the full-stack engineer - through technical, strategic and human development.

05 / DOES YOUR CAPSTONE...

Offer a mini Capstone before the Capstone?

Simulations, bootcamps and project-management training let students rehearse collaboration and professional practice before and during the main project.

06 / DOES YOUR CAPSTONE...

Create a peer-to-peer learning network of networks?

BeyondWalls connects learning across project teams, coaches, alumni and industry mentors: a peer-to-peer learning network of networks where expertise travels, communities connect and every learner can contribute.

WHY OUR CAPSTONE IS UNLIKE ANY OTHER / PART 2

BUILT BY STUDENTS. WITH STUDENTS.

07 / DOES YOUR CAPSTONE...

Work seven days a week - almost 24/7?

The commitment goes beyond class time: seven days a week, often late into the night, working to meet student needs. Discord, after-hours guidance, mentoring and follow-through keep support moving. The drive to help students does not end when class ends.

08 / DOES YOUR CAPSTONE...

Connect the entire journey through automation?

Next-Generation Capstone aligns and automates course guidance, team placement, daily and weekly performance tracking, individual requests and support, training opportunities and bootcamps - one connected experience built around each student.

09 / DOES YOUR CAPSTONE...

Transform a course into a student-run enterprise?

An educational experience becomes a full enterprise, run by students for students. A peer-to-peer university turns learners into educators and executives - holistic learning that builds full-stack problem solvers ready to tackle unfamiliar challenges across disciplines.

10 / DOES YOUR CAPSTONE...

Make alumni instrumental to the entire experience?

Our alumni return as advisors, mentors, sponsors, judges and extraordinary partners. Their continued involvement is one of Capstone’s greatest strengths: graduates help shape projects, guide students and open doors for the next generation.

11 / DOES YOUR CAPSTONE...

Open an immediate career pipeline?

Industry connections, public showcases and a visible portfolio create pathways to jobs before graduation. Students demonstrate their capabilities to employers during the semester, while alumni partnerships and paid Post-Capstone opportunities can extend that momentum.

12 / DOES YOUR CAPSTONE...

Make kindness and collective intelligence central?

Care, emotional and social intelligence, multidisciplinary collaboration and global problem-solving belong alongside technical skills. The goal is growth in the person as well as progress in the product.

BUILT AND DRIVEN BY THE STUDENTS, FOR THE STUDENTS, WITH THE STUDENTS.

THE LONG VIEW / NEARLY 25 YEARS OF EXPERIENCE

EXPERIENCE.
AT SCALE.

15,000+

PARTICIPANTS

2,000+

INDUSTRY PARTNERS

1,900+

REAL-WORLD PROJECTS

6

REAL-WORLD PATHWAYS

HISTORICAL PROGRAM MILESTONES / PREVIOUSLY REPORTED

FORTUNE 100 & FORTUNE 500.

A history of collaboration spanning major corporations, startups, small businesses and government organizations.

INDUSTRY LEADERS / PARTNERS & SPONSORS OVER THE YEARS

Microsoft / Johnson & Johnson / PSE&G / Bank of America / Prudential Financial / Merck / UPS

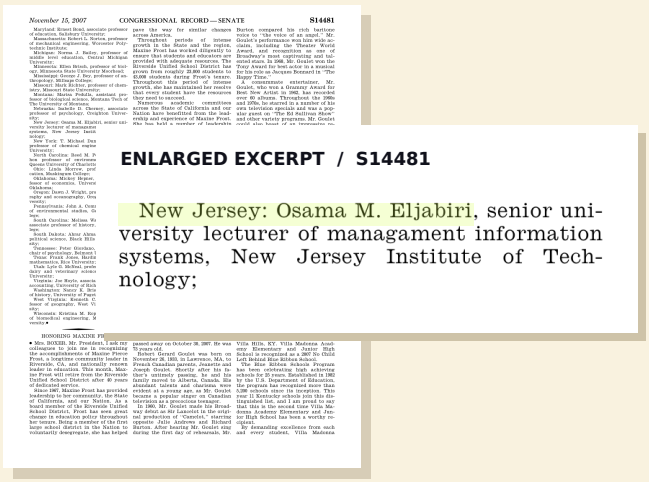
The wider sponsor history also includes NASA and the National Science Foundation.

01 / PURPOSE • FROM THE ARCHIVES

TEACHING & SERVICE

Five honors earned by Capstone director Osama Eljabiri, from NJIT teaching awards to statewide recognition for public service.

01 / THE CONGRESSIONAL RECORD



November 15, 2007 CONGRESSIONAL RECORD — SENATE S14481

ENLARGED EXCERPT / S14481

New Jersey: Osama M. Eljabiri, senior university lecturer of managament information systems, New Jersey Institute of Technology;

U.S. SENATE / NOVEMBER 15, 2007

2007

New Jersey Professor of the Year

The Carnegie Foundation for the Advancement of Teaching and the Council for Advancement and Support of Education named Eljabiri New Jersey's honoree in the U.S. Professors of the Year program.

OPEN THE SENATE RECORD ↗

02 / NJIT NEWS ARCHIVE



JEFFERSON AWARDS MEDALLION / NJIT NEWS

2017

New Jersey State Governor's Jefferson Award

The award recognized Real World Connections, which brought hands-on STEM learning to thousands of New Jersey middle and high school students.

READ NJIT NEWS ↗

MORE NJIT HONORS

2001 ↗
Excellence in Teaching
NJIT

2003 ↗
Excellence in Teaching
College of Computing Sciences

2007 ↗
Excellence in Service
NJIT Board of Advisors

04 / PREPARE. PRESENT. CONNECT.

PRACTICE MEETS OPPORTUNITY.



DGE SIMULATION WORKSHOP

The Mini Capstone Before the Capstone: practicing project development and presentation before the main Capstone experience.



INDUSTRY OPEN HOUSE / SPEAKERS

Fall 2026 Capstone Major Industry Open House.



INDUSTRY OPEN HOUSE / AUDIENCE

Students gather for industry presentations.

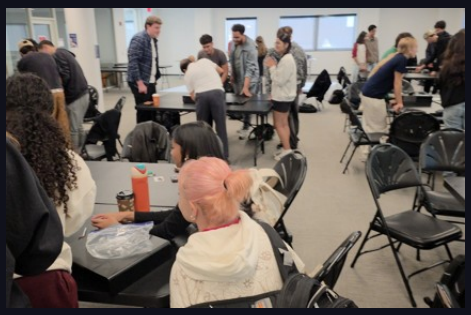
02 / PRACTICAL LEARNING & LEADERSHIP

LEARN. LEAD. BUILD.

PC-BUILD TRAINING / A HANDS-ON SNAPSHOT







Participants examine computer hardware together, connecting technical concepts with components they can see and handle.

PROJECT MANAGEMENT / LEADERSHIP IN PRACTICE

Plan it. Own it. Communicate it.

PM training connects scope, sprint planning, contribution evidence and conflict management to the everyday work of leading a team. The certificate initiative gives that preparation a visible milestone.

DGE / THE MINI CAPSTONE BEFORE THE CAPSTONE

The simulation workshop creates a rehearsal for project development and presentation before the main Capstone experience. Students practice explaining their work and learning through team activity.

BEYONDWALLS / LEARNING FROM ONE ANOTHER

Approved coaches can share practical expertise through workshops. The learning network expands the opportunities to develop skills across disciplines and apply them to real project needs.

06 / NETWORK ENGINEERING

MAKE THE CONNECTION.



NETWORK FOUNDATIONS

Collision & broadcast domains

Participants follow a networking lesson with laptops open as the presenter explains the concepts on screen.

FROM CONCEPTS TO PRACTICE

Understanding network behavior supports design, configuration, testing and troubleshooting.

01 / THE CAPSTONE DIFFERENCE

MORE THAN A FINAL PROJECT.

180	92	98
WORK ITEMS	ACCEPTED	EVIDENCE LINKS

Undergraduate PULSE snapshot: nine teams with substantive internal-board work. External boards are excluded; these are task counts, not finished MVP totals.

01

BeyondWalls University

A shared learning network connects students and approved coaches through practical workshops. Its topic bank offers 300 workshop ideas across 30 areas. The new app launched under testing.

02

Open House, digitally connected

Explore projects, express up to three interests, receive sponsor offers and accept one placement. The Placement App records approved-and-locked commitments while supporting real conversations.

03

Next-Generation Capstone

An aligned digital journey connects course guidance and the student assistant, team placement, daily and weekly performance tracking, individual support, training and bootcamps. Automation supports the people at every step.

SEE THE CAPSTONE APP GALLERY / p. 12

APP GALLERY / CAPSTONE AUTOMATION

CAPSTONE, CONNECTED.

From the first application to learning beyond the classroom.

01

Admissions

Explore pathways and apply.

SPRING 2027 PREVIEW

02

Placement

Match students with projects.

FALL 2026 SNAPSHOT

03

THE PULSE

Track progress and feedback.

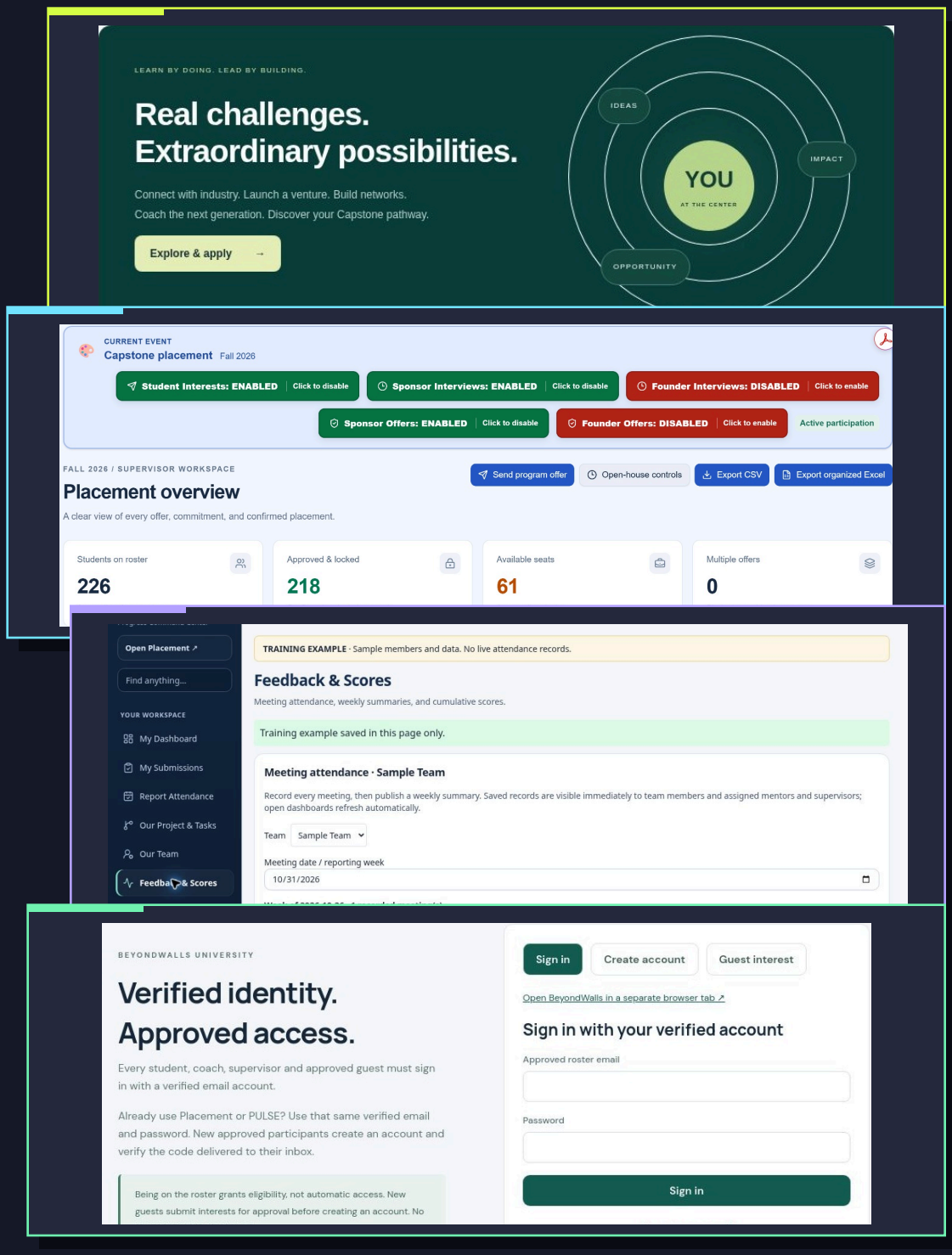
TRAINING VIEW

04

BeyondWalls University

Keep learning. Teach each other.

ENTRY SCREEN



PULSE / FALL 2026 INDUSTRY & PROJECT HIGHLIGHTS

INDUSTRY PROJECTS. TANGIBLE PROGRESS.

01 / ACCESSIBILITY

New Jersey Courts

Accepted work includes PDF parsing, accessible form controls and an end-to-end prototype skeleton.

02 / MERCK

Commitment report automation

The team reports 11 tasks done and an end-to-end interface connected ahead of schedule. Query ingestion, due-date processing, filtering and multi-tab Excel output are implemented.

03 / CENTER FOR CARE OPTIMIZATION

AI governance & wellness

Three research deliverables were completed for sponsor review: federal rules, a seven-state landscape and buyer expectations. Related governance work covers decision rights and audit trails.

04 / NETWORK ENGINEERING

Cisco teams

Team 6 records firewall and stateful-inspection progress; Team 8 records campus design, VLAN and spanning-tree work.

ALUMNI / THE PEOPLE WHO KEEP COMING BACK

ONCE STUDENTS. ALWAYS PARTNERS.

One of the most instrumental forces behind the Capstone experience.

Our alumni do more than stay connected. They help carry the program forward - returning as advisors, mentors, sponsors, judges and extraordinary partners. Their time, experience and commitment connect current students with a professional community that continues beyond graduation.

ADVISORS	Help shape direction, strengthen the learning experience and bring professional judgment.
MENTORS	Coach teams through decisions, challenges, communication and professional growth.
SPONSORS	Bring meaningful real-world problems, stakeholder guidance and project opportunities.
JUDGES	Ask the questions that sharpen a demonstration and provide feedback students can use.
PARTNERS	Open doors, build connections and help the next generation become more visible.

The learning does not end with the course.
Graduates return to help create it for someone else.

2026 / PARTNERSHIP & LEADERSHIP

REAL PARTNERS. REAL INFLUENCE.

MERCK / SPONSORSHIP & SHOWCASE

A sustained industry relationship

Merck is a returning project sponsor. The June 2026 report recognized its multi-year involvement and listed the Jane Kalla Submission Dashboard team among Spring winners. The relationship brings sponsor feedback, project expectations and student demonstrations into the same experience.

Earlier NJIT reporting also documented a team presentation to senior leadership at the Merck Rahway headquarters - a partnership milestone preceding 2026, rather than a new 2026 event.

UPS / SPONSORED WORK & PROFESSIONAL MENTORSHIP

Enterprise problems. Student solutions.

The Spring 2026 UPS analytics team earned category recognition for an OpenShift capacity-planning tool. Allie He described utilization visibility, workload modeling and what-if forecasting, and credited UPS sponsors Brian Bollard, Ted Johansmeyer, Ronak Shah and Matt Perucki.

MICHAEL GERAGHTY / PUBLIC-SECTOR LEADERSHIP

The Spring 2026 showcase announcement welcomed Michael Geraghty as New Jersey Chief Information Security Officer. NJIT has also documented his longstanding role leading Capstone judging. His involvement connects student presentations with state-level cybersecurity experience.

05 / COMMUNITY

SHARED WORK.
SHARED MOMENTS.



THE CONNECTION CONTINUES.

An informal gathering captures another side of the community: conversation, camaraderie and time together.

BEYOND THE CLASSROOM

A group selfie captures a relaxed moment around the table.

Capstone coaches also share skills with younger learners through RWC. The proposed CS104 coaching pilot creates another opportunity to learn by teaching.

COMMUNITY / ON STAGE & IN THE ROOM

THE CONNECTION BECOMES REAL.



MERCK / SPRING 2026 WINNING TEAM

Showcase-stage photo shared with Merck following the Spring 2026 event.



ON STAGE / SPRING 2025 ARCHIVE

Recognition from the gallery shared with Michael Giorgio and Donna Russo.



LIVE DEMO / SPRING 2025 ARCHIVE

A student project demonstration from the same Capstone photo collection.

2026 YEAR TO DATE / IN THE NEWS

FROM SHOWCASE TO REAL USE.



SPRING 2026 / NJIT NEWSROOM

Students at the YWCC showcase. Photo: NJIT News, published June 1, 2026.



STUDENTS & THEIR PROJECT

Photo: Adit Nuwal / LinkedIn.

WAKEFERN / LIVE EVENT TECHNOLOGY

NJIT reported that student-built event software was deployed for the 2026 ShopRite LPGA Classic, replacing printed materials with profiles, scoring and course maps.

The report also highlighted Contextral, whose co-founders were working with Newark on applied technology projects, including an AI/computer-vision Capstone effort.

READ THE NJIT STORY

SPRING 2026 / SHOWCASE & AWARDS

THE MOMENT OF RECOGNITION.



WAKEFERN / AWARDS STAGE

Photo: Adit Nuwal / LinkedIn.



CAMPUS MARKETPLACE / AWARDS

Photo: Maryam Mughal / LinkedIn.

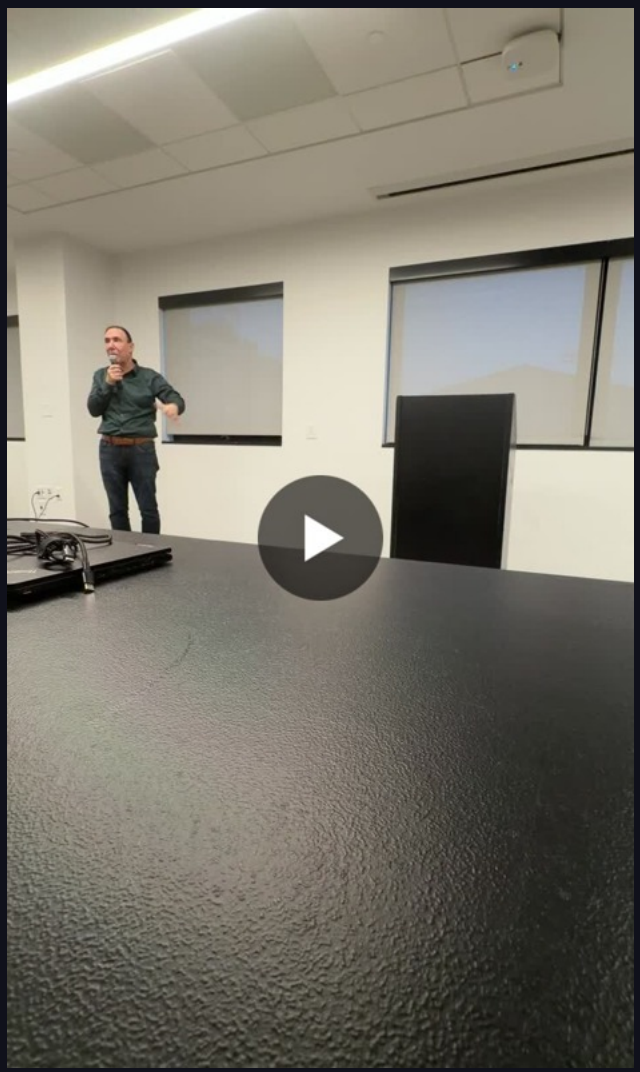
WINNING PROJECTS LISTED BY NJIT NEWS

Campus Marketplace / Safety Locator / Cisco Team 9 / Wakefern (Adit Nuwal) / Merck Submission Dashboard (Jane Kalla) / UPS Analytics (Mithil Patel) / Student Support & Mentorship Academy.

The May 3 showcase announcement paired public demonstrations with an evening awards ceremony at the NJIT Campus Center. The celebration recognized student achievement across the judging panels.

SUMMER 2026 / SHOWCASE & ALUMNI

FIVE WEEKS. LASTING LESSONS.



SUMMER SHOWCASE / AUGUST 7 POST

Cisco judging. Alumni perspective.

Richard Thompson reported serving as lead judge for the Summer Showcase Cisco panel. He highlighted one team progress in just five weeks, following a recent bootcamp lecture.

His post also shared a recording of his alumni keynote. Its message centered on continued learning, professional relationships and staying motivated as students move into their careers.

WATCH THE SUMMER KEYNOTE

VIDEO PREVIEW / SUMMER SHOWCASE

Thumbnail from Richard Thompson public LinkedIn video, published August 7, 2026. The preview shows the introduction; the linked recording includes his alumni keynote.

Summer Capstone brings practical learning, industry feedback and alumni connection into an intensive project experience.

03 / RECOGNITION

THE PEOPLE.
THE ACHIEVEMENT.



01 / CERTIFICATE MOMENT

Certificate holders gather with fellow participants.



02 / A SHARED MILESTONE

A group portrait marks the occasion.

IMAGINE / CREDENTIALS. CONFIDENCE. RECOGNITION.

LEAVE WITH MORE.

Earn Capstone PM certificates. Build toward PMP and CCNA, explore potential AWS certification pathways, and pursue numerous other learning credentials.

Standout contributions can also lead to recommendation letters and awards recognizing top winners, project leaders and MVPs.

Professional certifications require the issuing organization’s eligibility criteria and exams.

THE LONG VIEW / EDUCATIONAL REACH

FROM CAMPUS TO SOUTH AMERICA

The Capstone approach to real-world projects became a model for courses across NJIT and for learning well beyond campus.

01 / ACROSS NJIT

A model for new courses

The model helped launch a university-wide project course and multidisciplinary immersion courses called Project Based Learning. Sponsored by the Office of the Provost, the immersion courses served freshmen and sophomores across multiple NJIT colleges for two consecutive years. Other courses across the university adopted the same model.

02 / ACROSS NEW JERSEY

Thousands of students reached

Through Real World Connections, the model reached thousands of students in school districts across New Jersey, bringing hands-on project learning to younger students.

03 / IN SOUTH AMERICA

The model reaches Colombia

Real World Connections extended the approach internationally to Colombia, bringing project-based learning to students in South America.

08 / WHAT COMES NEXT

KEEP BUILDING.
KEEP SHARING.

MVP PRESENTATION BENCHMARK

Learn from Mindflow

Swapnil Deb's midterm submission offers a reference for explaining the problem, demonstrating value and telling a clear project story.

WATCH THE PRESENTATION / youtu.be/vcz5J9veBWc

ON THE HORIZON

Capstone on the Road

Preparations include the November 20 Union City event. The proposed November 11 digital showcase, 2-4 p.m., remains tentative and depends on industry participation.

LEADERSHIP & SKILLS

PM training supports team leadership. The October Cisco bootcamp and assessments focused on network skills, while four startup teams are working toward demonstrable MVPs.

YOUR VOICE / NEXT ISSUE

Teams. Alumni. PMs.

Share 150-250 words, one accomplishment, your next milestone and captioned photos. Enterprise-team stories and leadership reflections are welcome.

YOU’RE INVITED

WITNESS IT FOR YOURSELF.

NJIT CAPSTONE SHOWCASE

Watch live project demos. Meet the students behind them. Ask how they turned real problems into working solutions.

SATURDAY

DECEMBER 5

2026

TIME / EASTERN

3:00–6:00 p.m.

VENUE

NJIT Ballroom

JOIN US AT NJIT.

See what student-led teams can build in one semester.