ITS FACULTY SENATE UPDATE 2023

COLE W. CAMPLESE, VICE PRESIDENT FOR INFORMATION TECHNOLOGY AND CHIEF INFORMATION OFFICER

Photo Credit, Qianqian Fang

IT SERVICES OVERVIEW

4.55/5
Average Customer Satisfaction

130K+
Service Desk Interactions

Academic Technologies & Research Computing	Information Security
Infrastructure	Enterprise Platforms & Business Intelligence
Engagement & Customer Experience	Global IT Operations

Areas of Organizational Responsibility

240 FTE

300 Students

50+
Topics for In-Person & Online Training

1,000+
Self-Service KB Articles

CONSULTING & SUPPORT

- https://service.northeastern.edu/tech
- 24x7x365 IT Support
- In-person and virtual support options
- Phone: 617.373.HELP [4357]
- Email: help@northeastern.edu
- Online Chat

INFORMATION TECHNOLOGY SERVICES OFFICE OF THE CIO

Cole W. Camplese
VP & CIO

Steve Duncan
AVP of Enterprise Platforms

Karen McCarthy
AVP & Deputy CIO, ITS Operations

Spencer Pruitt, PhD
AVP of Research Computing and Academic Technologies

Marcus Robinson
AVP & Deputy CIO, Engagement and Experience

Amanda Fratticcioli
Head of the Office of the CIO

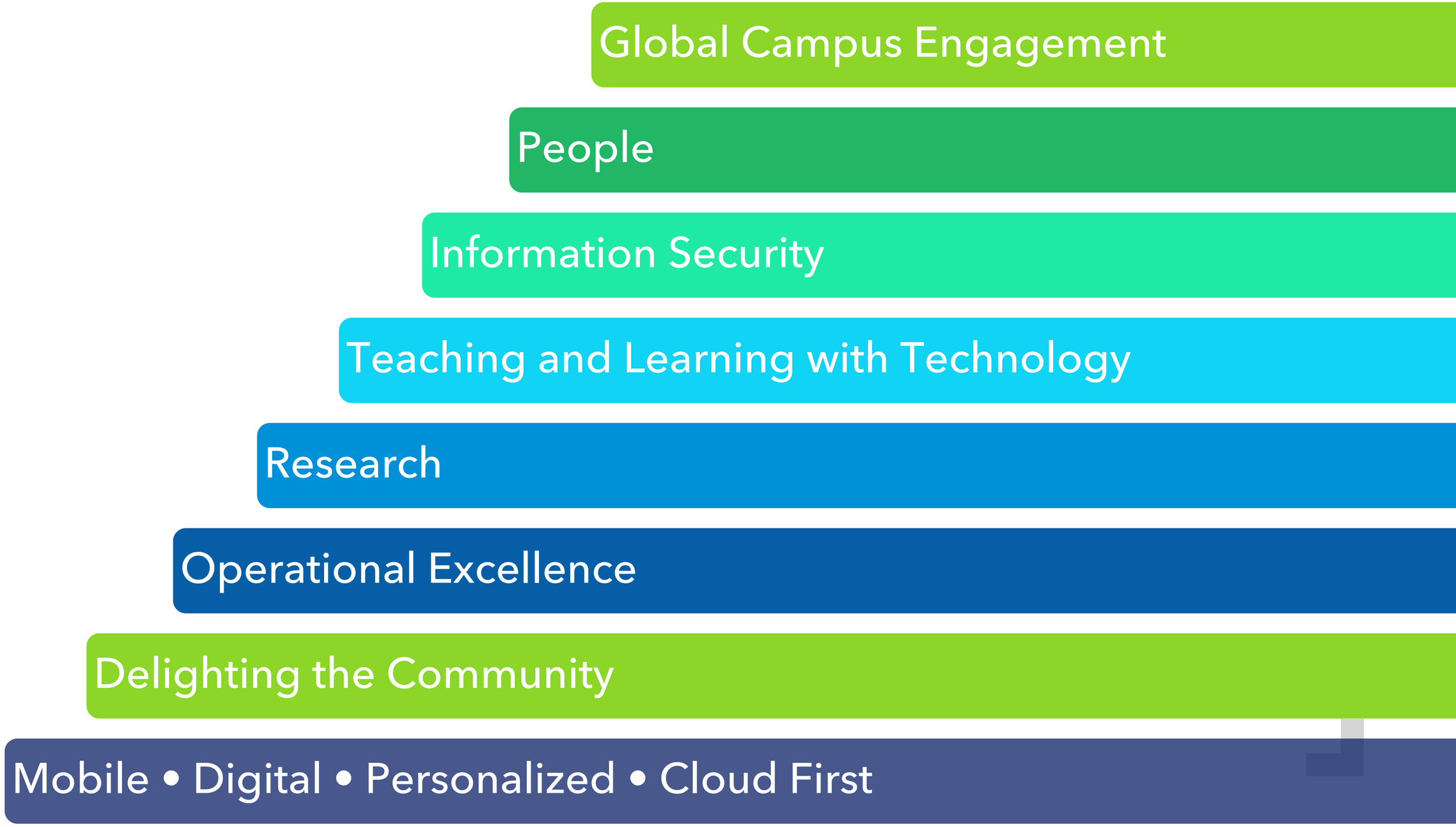
Harry Hoffman
AVP & CISO

Matt Meyer
AVP of Global IT Operations

Kacie Harkins
Director, IT Project Management Office

http://cio.northeastern.edu

STRATEGIC DRIVERS



While Boston is our “HQ1”, everything we do is in support of the growing Global Network.

CORE PRIORITIES

Personalization

Digital University

Systems & Infrastructure Transformations

Information Security

Notable FY23-27 LRP Highlights

FY23

- Financial System Discovery
- Network Modernization
- Banner Platform Refresh
- Global Digital Platform
- Slate
- Giving System Modernization
- Global Classroom Expansion

FY24

- Kick Off Financial System Modernization
- Network Modernization
- ServiceNow as a Platform
- Global Digital Platform
- Device as a Service
- Salesforce Modernization
- Global Classroom Expansion

FY25

- New Financial System
- Network Modernization
- Global Digital Platform
- 1:1 Device for Faculty
- Global Classroom Expansion

FY26

- Complete Financial System
- Network Modernization
- Student Information System Discovery
- Global Digital Platform
- On-Prem Data Center Closure

FY27

- Kick Off Student Information System Modernization
- Global Digital Platform

INFORMATION SECURITY MISSION

We ensure that the university's technological environment is secure and meets regulatory and compliance requirements.

RANSOMWARE

Attackers encrypt organization’s data and demand payment to restore access.

- Microsoft Office: Built-in ransomware protection
- File Systems: Superna Defender provides protection
- Backups: Cohesity backup service with built-in ransomeware protection

DATA BREACH

Unauthorized access to confidential or sensitive data such as PII, and medical and financial data.

- Data loss tools in our Microsoft Office license
- Security tools on servers and laptops
- Encryption for data at rest

SOCIO-POLITICAL EVENTS

Events such as the war in Ukraine reverberate and show up in acts like state-sponsored cyberattacks and hacktivism.

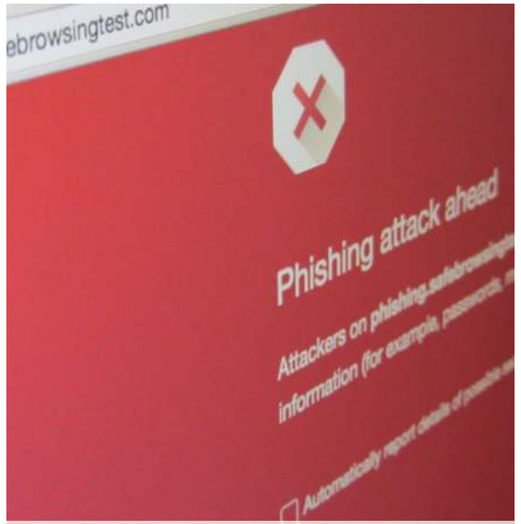
- Multi-factor authentication protects all users
- Firewalls and security appliances to protect the network
- Managed security services provide 24/7/365 monitoring and alerts

SECURITY STATISTICS

236,339 USERS

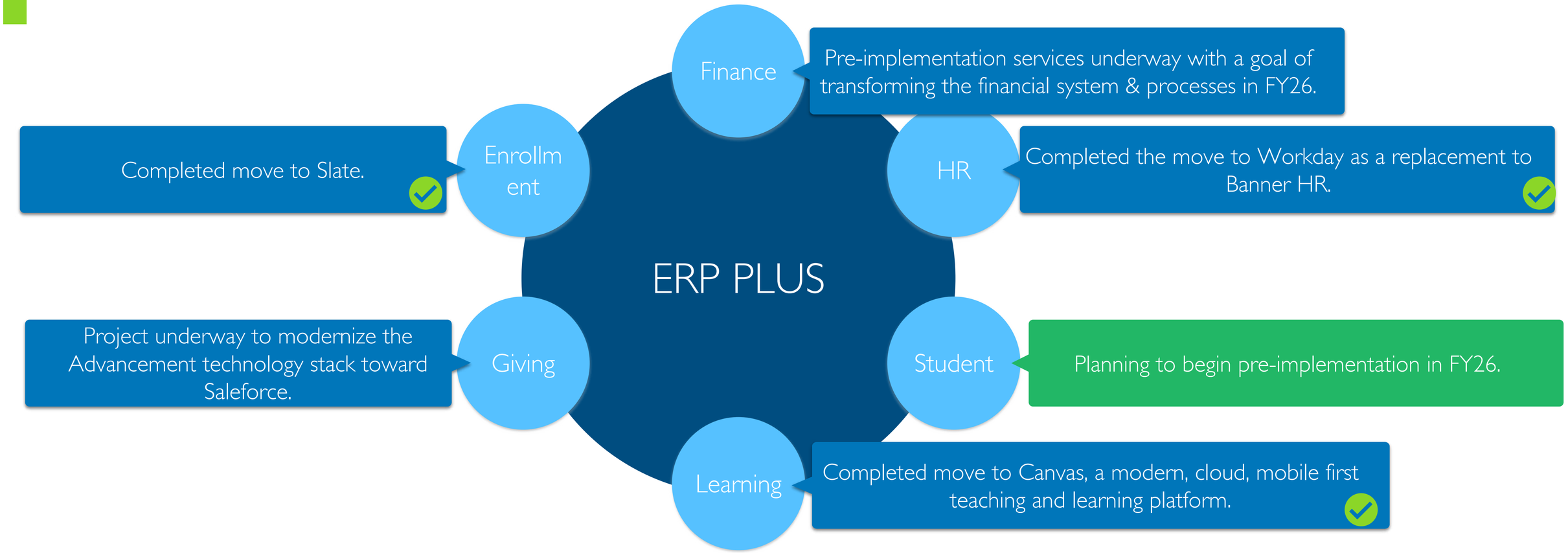
11,710 MANAGED DEVICES

6M+ ATTACKS/DAY



5500+ PHISHING ATTACKS/MONTH

SYSTEM TRANSFORMATION STRATEGY



Data Integrations, API Platform, & Event Streaming

Salesforce Modernization

Modern Data Platform

ENTERPRISE SYSTEM IMPACT

Banner Finance & Student

135K Registrations/Term

$985M Billed/Term

Office 365

252K Mailboxes

24K Teams

80.4K Meetings/Month

Cbord Gold

25K ID Cards

9K Door Lock Access

25K Meal Plans

SalesForce

Deployed in 2006

1200 Named Users

380K Person Records

DIGITAL UNIVERSITY

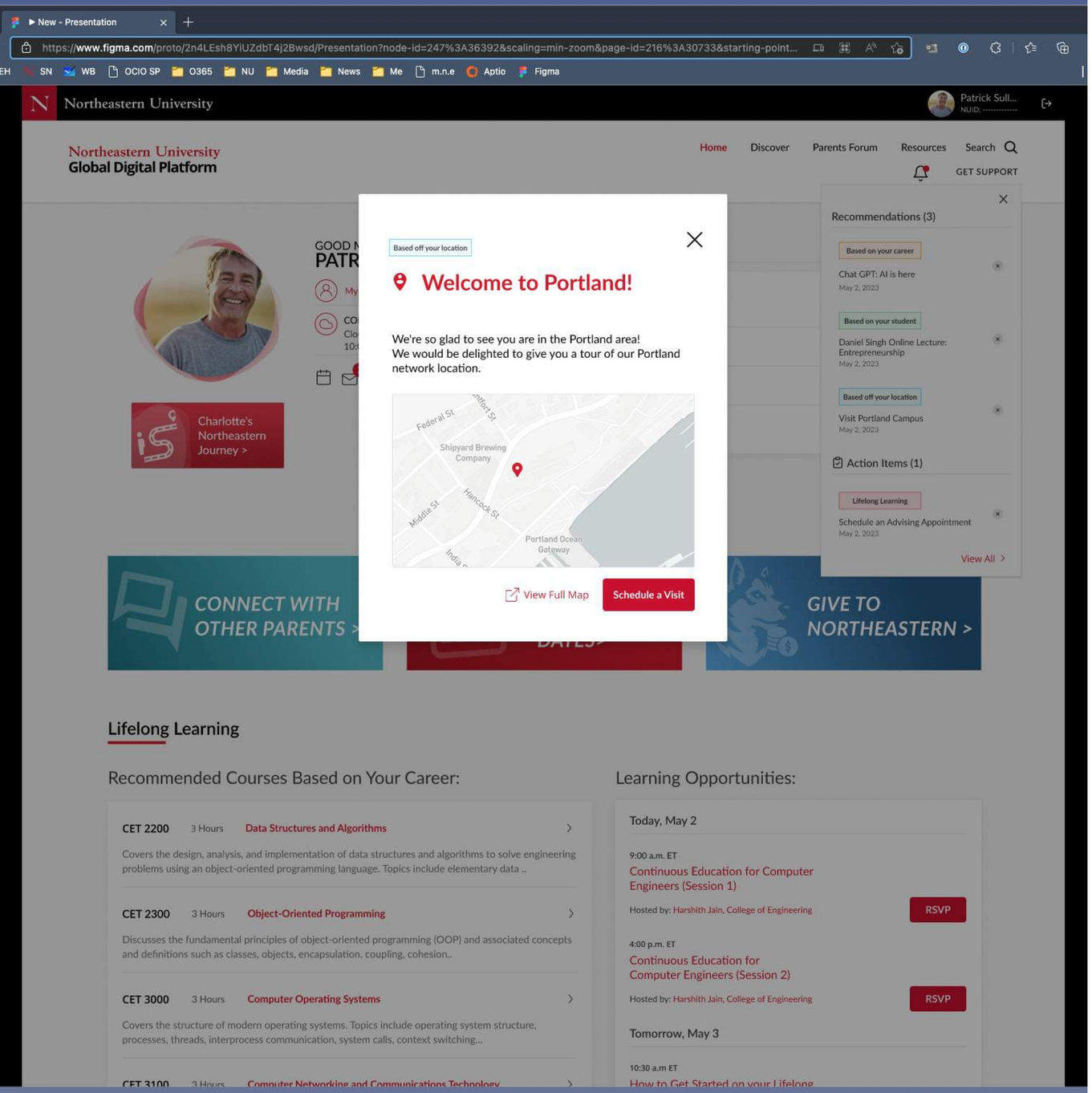
Digital Dexterity		Digital Transformation		Digital Academy	
Easy-to-Use Technology	Engaging Deployment	Enterprise Platforms	Data Governance	Learning Spaces	Seamless Experiential
Audience Experience		Business Outcomes		Student Success	

- Digital Collaboration
- Hiring Digital
- Community Engagement
- ERP Transformation
- Data Management
- Personalization
- Faculty Consulting
- Student Experience
- Research Computing

ENVISIONING THE GLOBAL DIGITAL PLATFORM

COLE W. CAMPLESE, VICE PRESIDENT FOR INFORMATION TECHNOLOGY AND CHIEF INFORMATION OFFICER

Photo Credit, Qianqian Fang



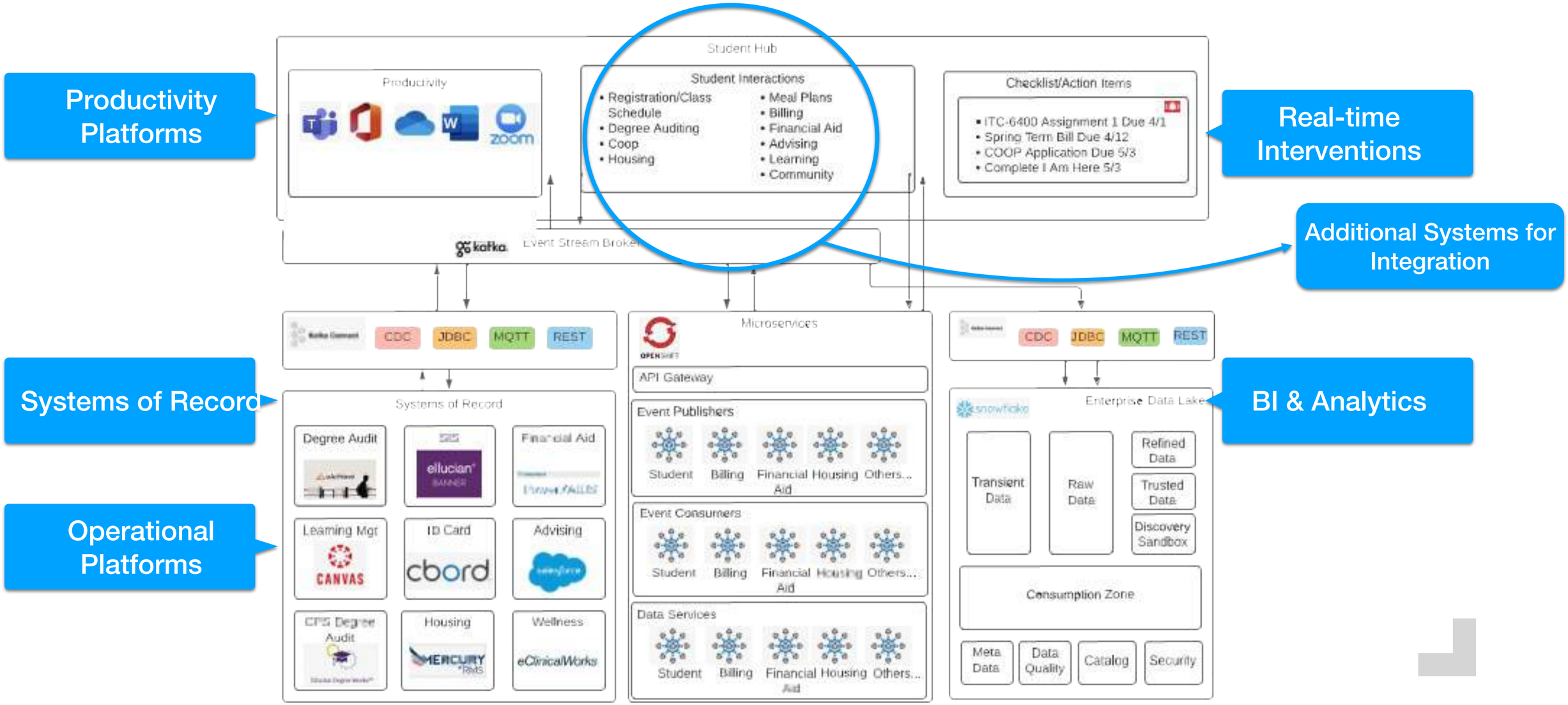
PERSONALIZATION

THE GLOBAL DIGITAL PLATFORM
AND HUB ECO-SYSTEM

GLOBAL DIGITAL PLATFORM

- A “platform of platforms” that empowers the work of our varied and future audiences
- There are three elements to what will become the differentiating global digital experience:
  - Layer 1: Robust, cloud first systems of record, modern data platform, & event-driven API environment
  - Layer 2: Resilient global infrastructure
  - Layer 3: Digital, personalized aggregators that provide a delightful and powerful experience

THE GLOBAL DIGITAL PLATFORM IS AN ARCHITECTURAL FRAMEWORK



Current Event-driven Architecture

Delivering on Personal Desires

Parents

- Enable us.
- Inspire us.
- Connect us.
- Support us.
- Engage us.

Students

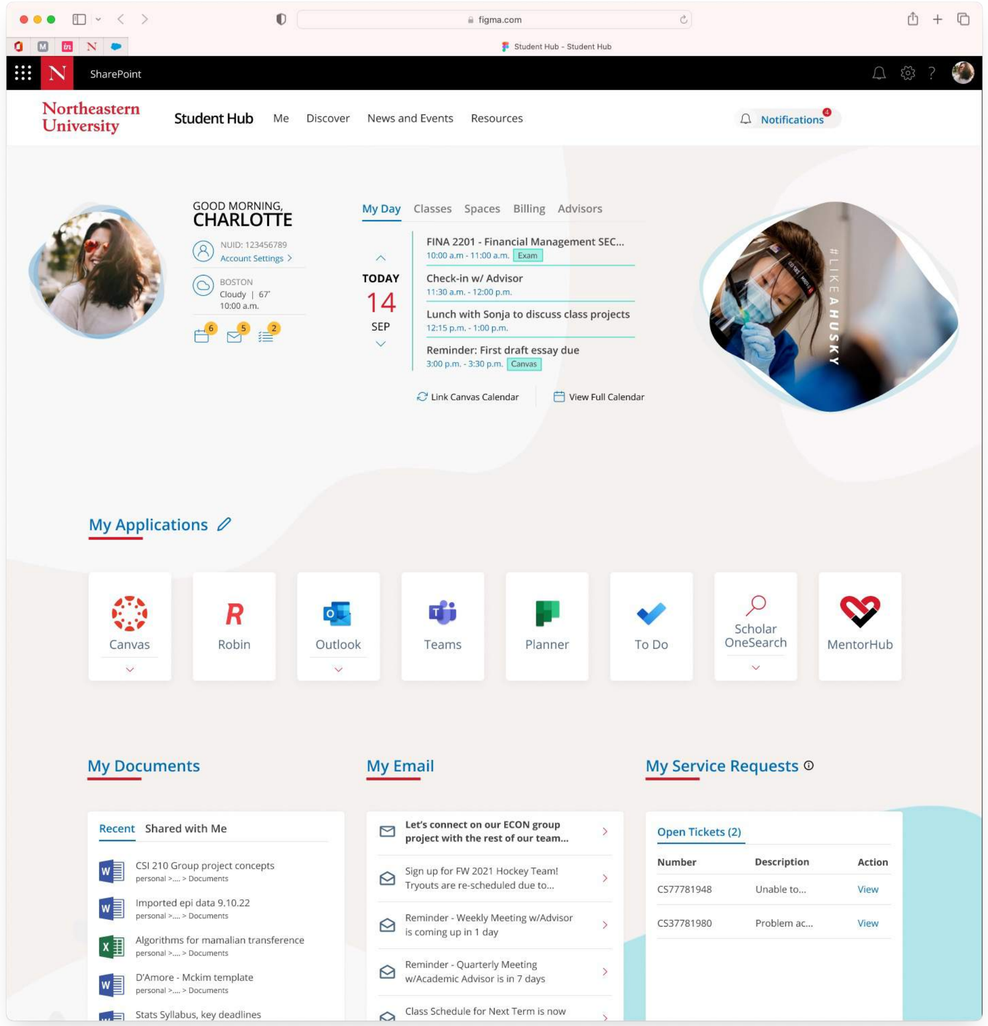
- Understand me.
- Anticipate my issues.
- Automate my remediation.
- Accelerate my value.
- Support me at scale.

Areas of Focus

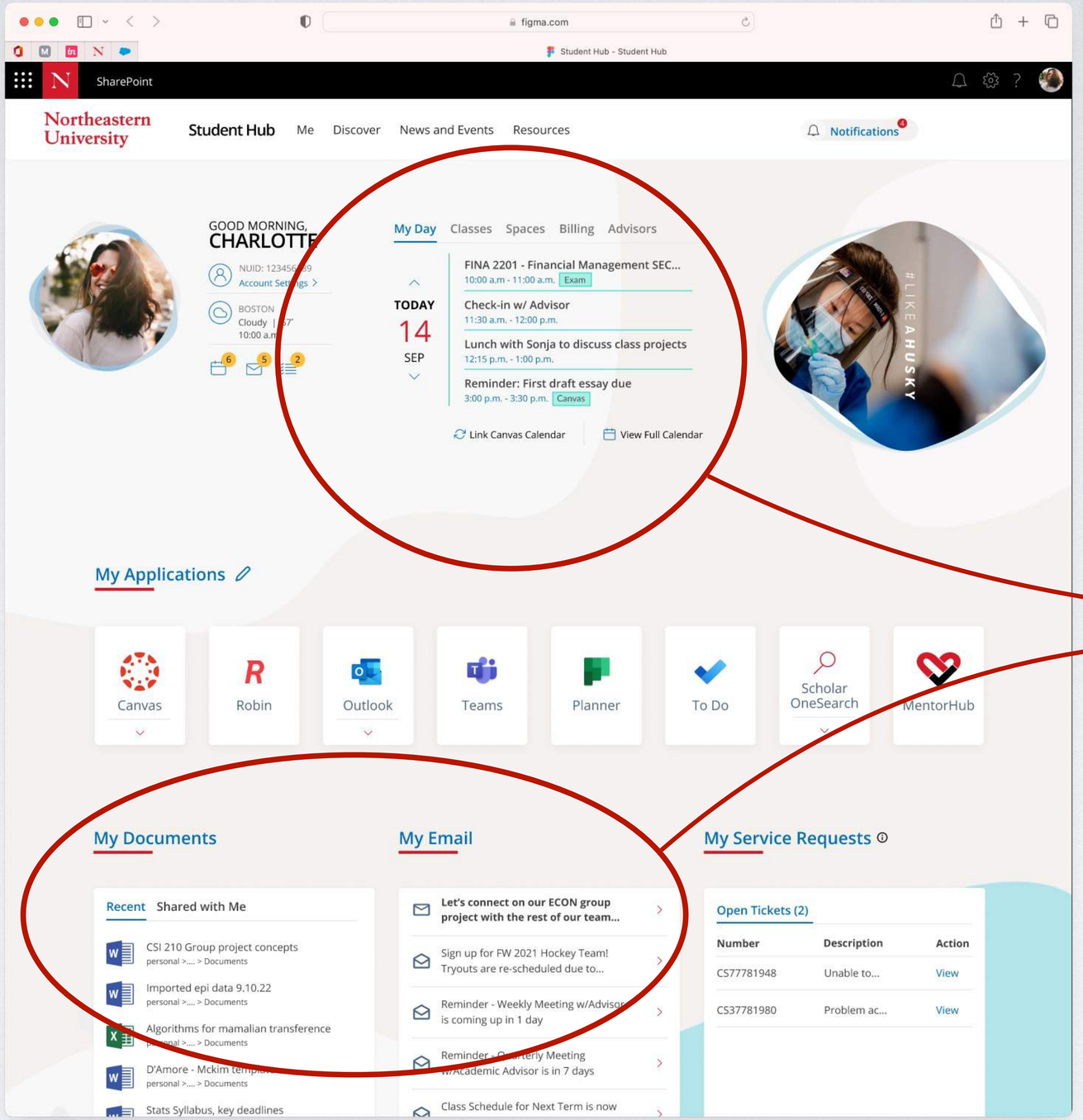
Alumni • Communities • Parents • Faculty • Employers • LLL • Next

STUDENT HUB KEY METRICS

- 11,500 average unique students per day
- 4 Average visit per student per day
- 660+ students providing input and feedback
- Top features by student use:
  - Canvas integration
  - Class schedules
  - Resources

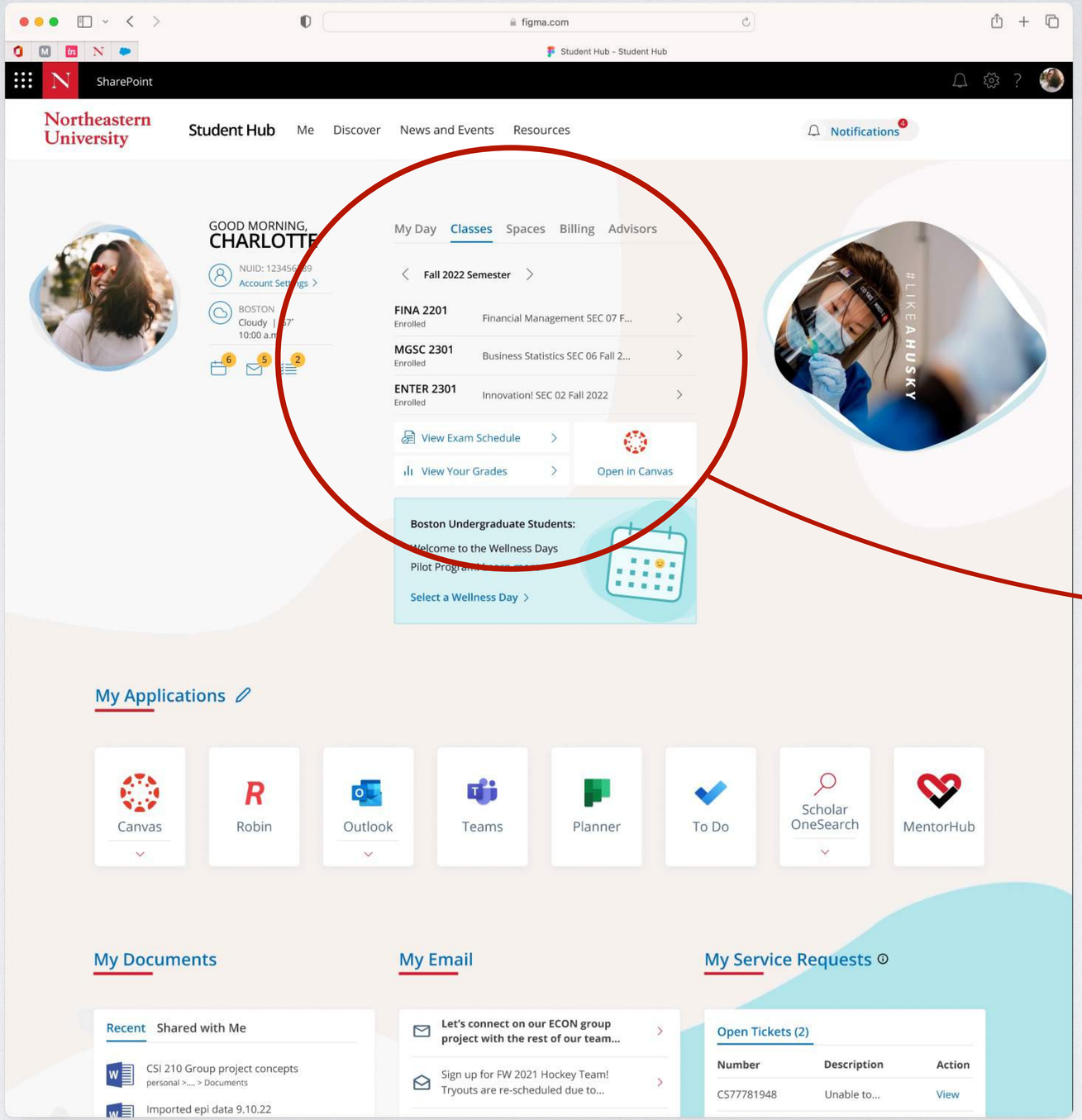


Students are presented with a hyper personalized environment that delivers real time information that allows her to take immediate action across a nearly unlimited number of tasks.



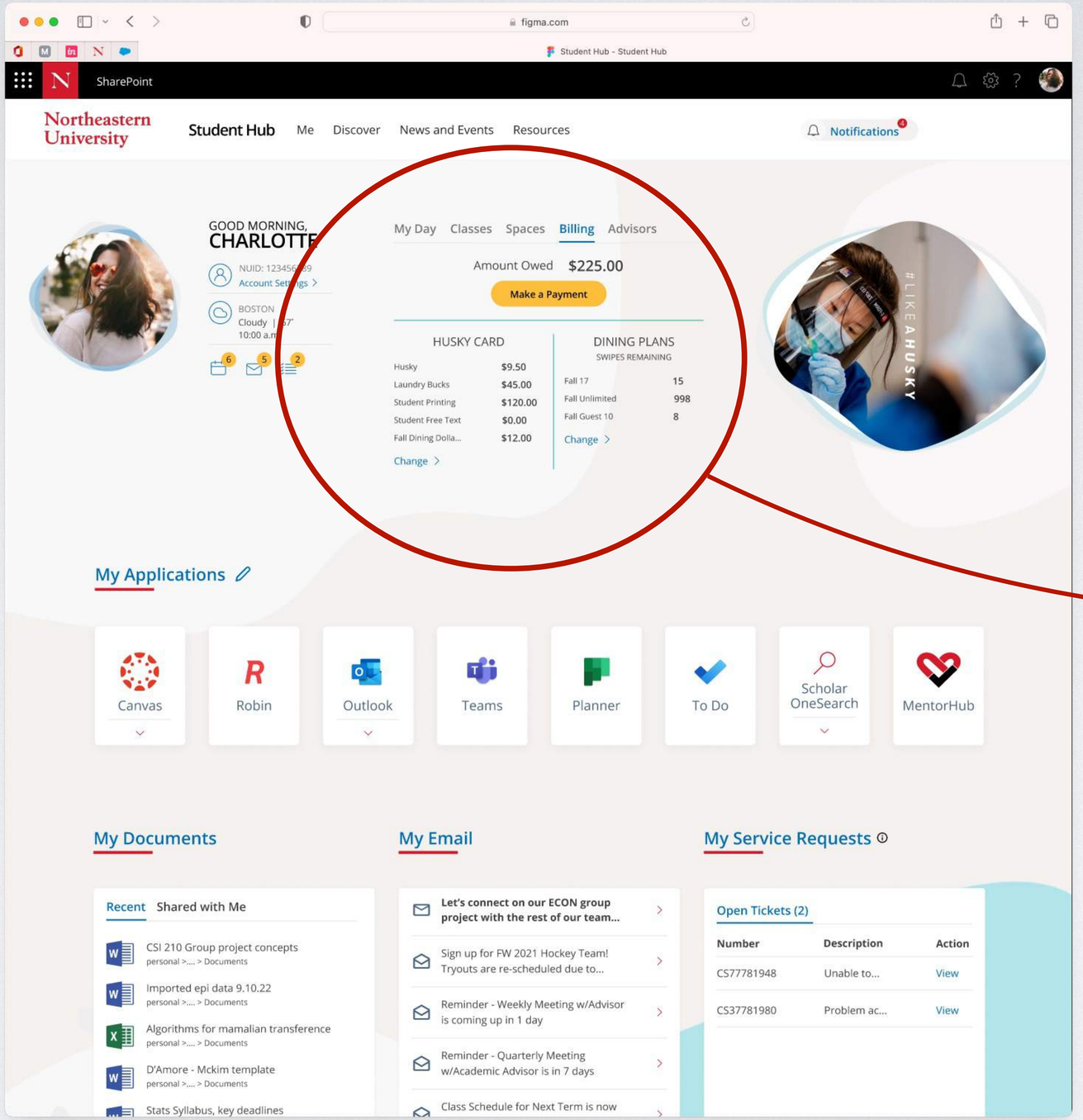
Realtime O365 & Canvas integration.

Students are presented with a hyper personalized environment that delivers real time information that allows her to take immediate action across a nearly unlimited number of tasks.



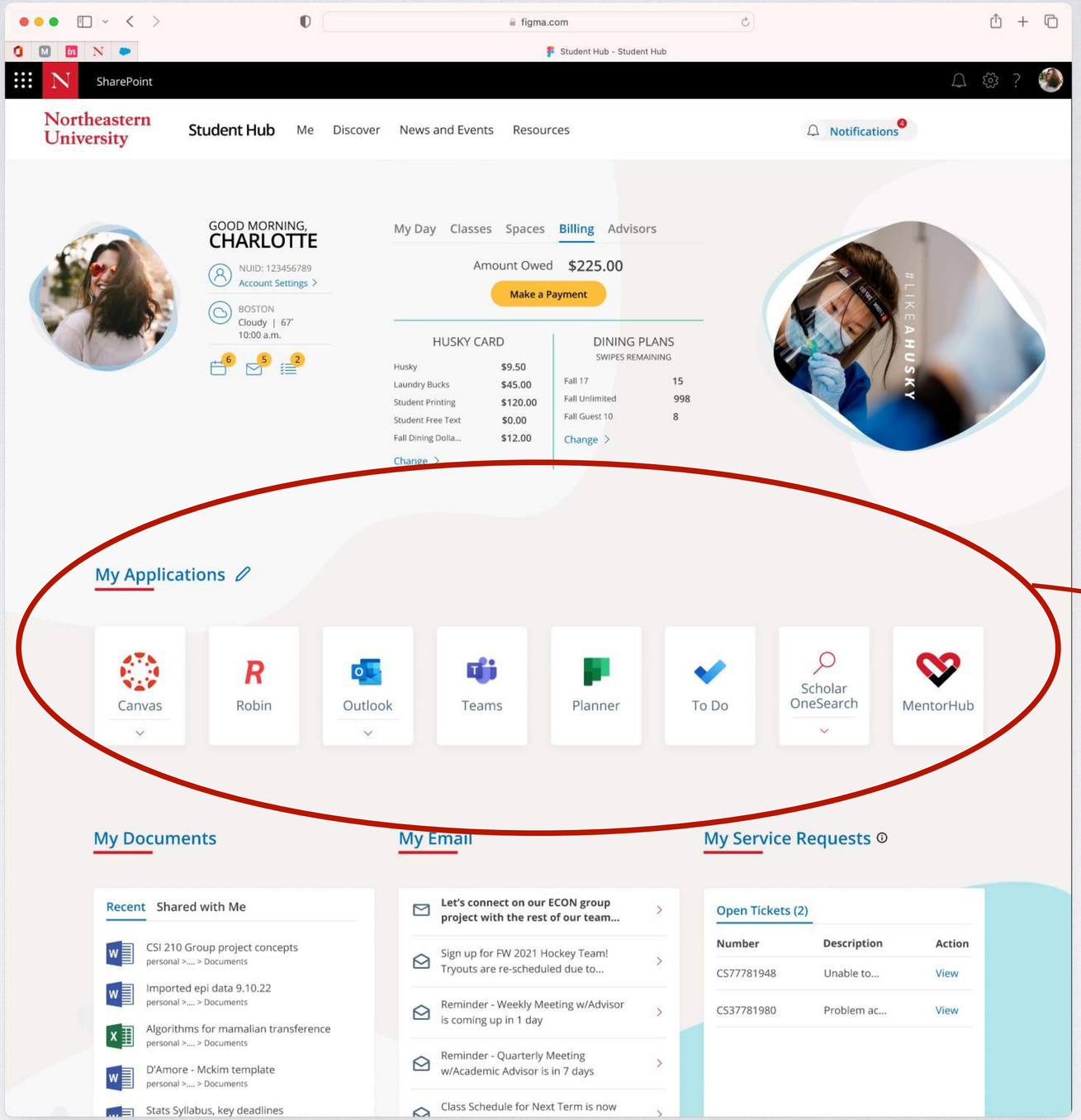
Realtime class lists, Canvas access, exam schedules, etc.

Students are presented with a hyper personalized environment that delivers real time information that allows her to take immediate action across a nearly unlimited number of tasks.



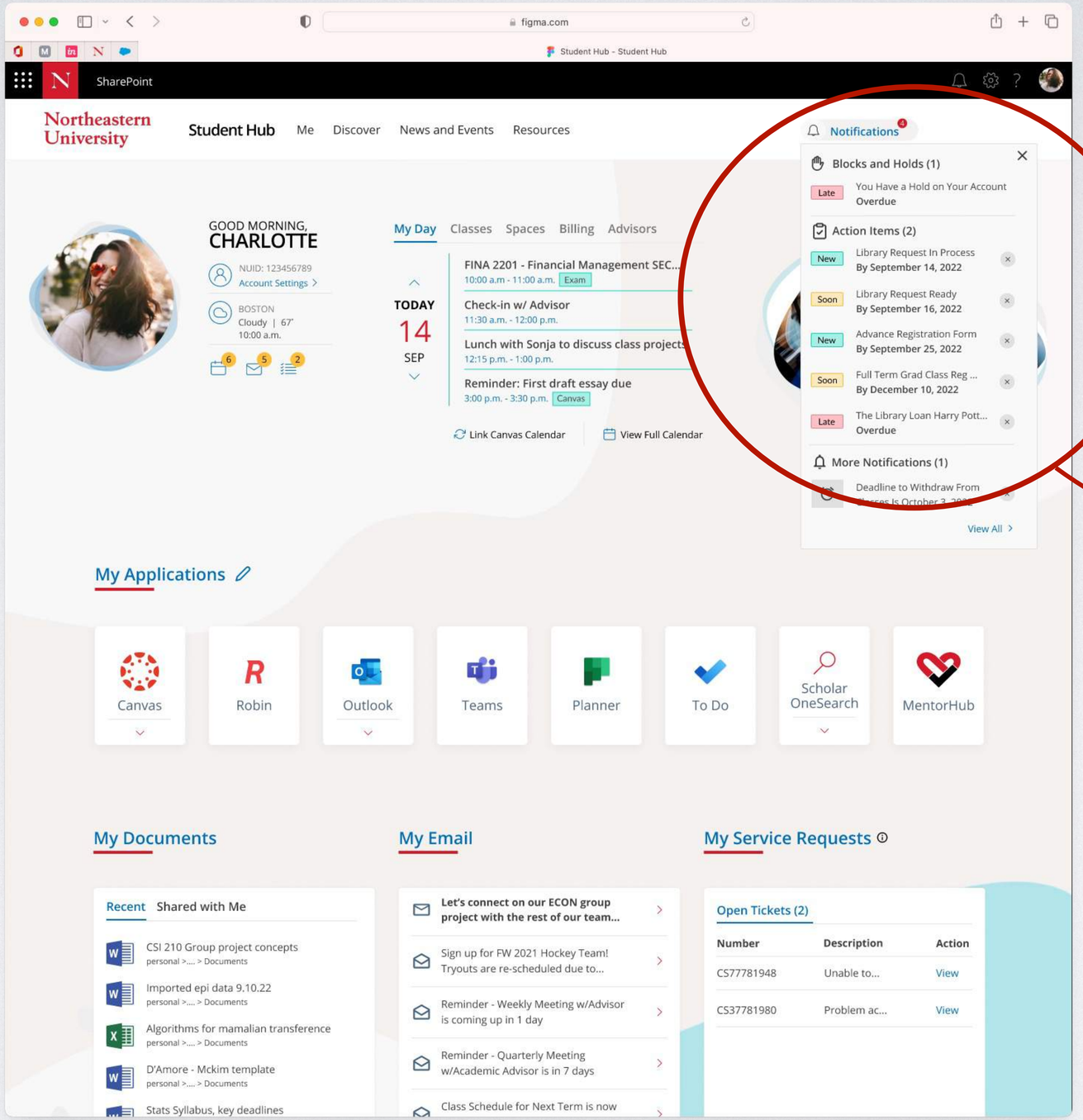
Realtime billing information with integrated payment.

Students are presented with a hyper personalized environment that delivers real time information that allows her to take immediate action across a nearly unlimited number of tasks.



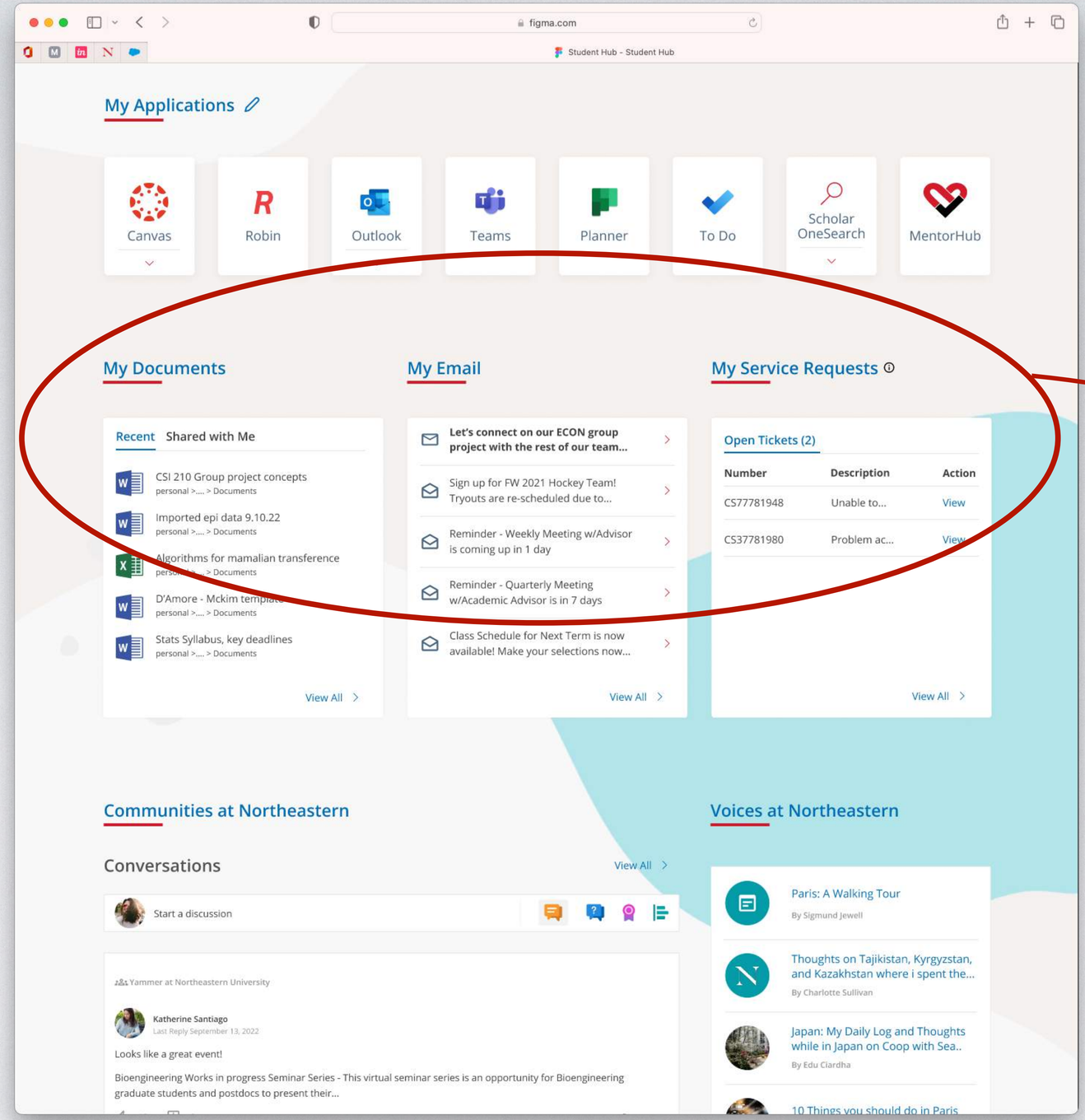
Unlimited & highly customized micro-services.

Students are presented with a hyper personalized environment that delivers real time information that allows her to take immediate action across a nearly unlimited number of tasks.



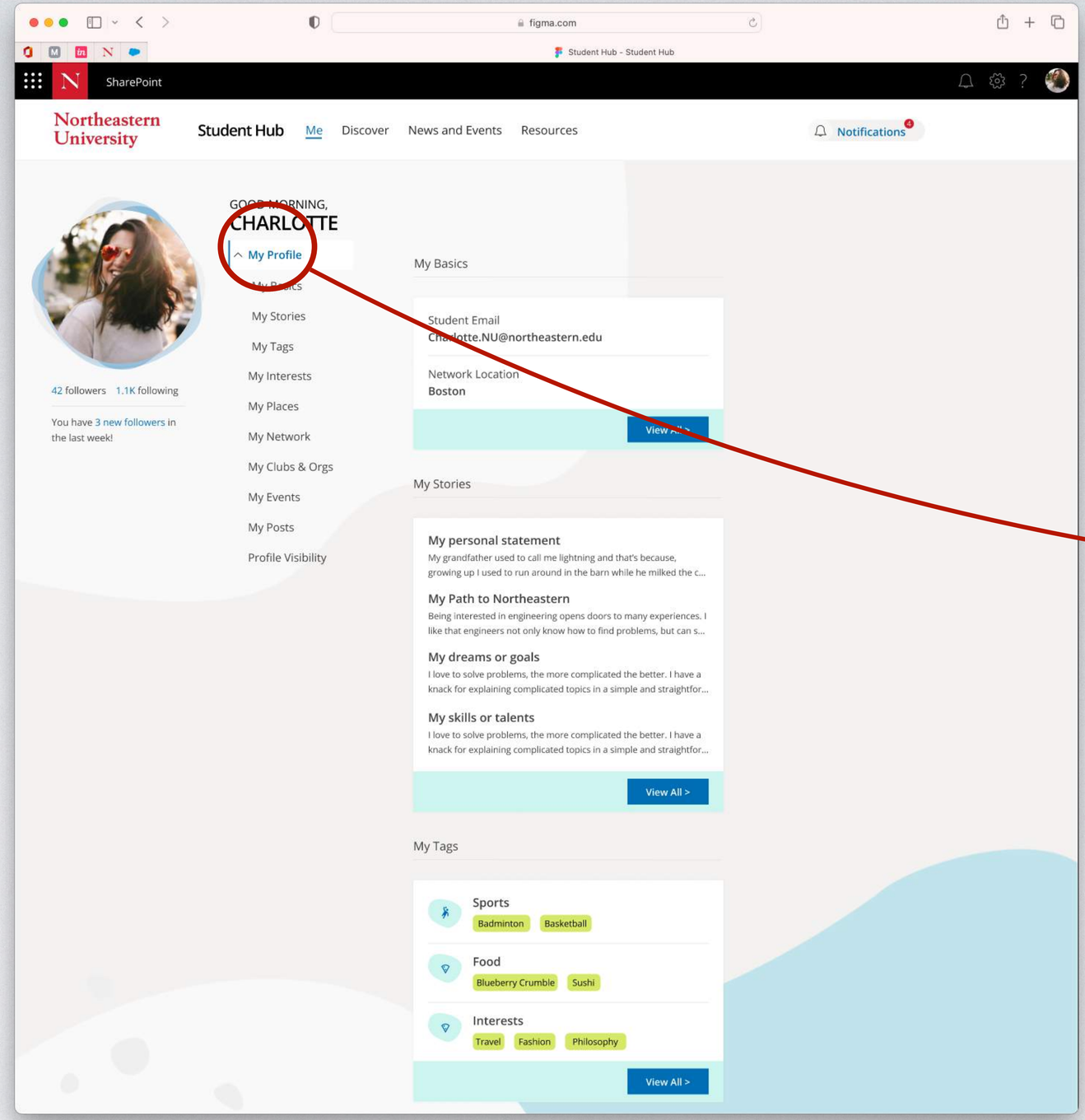
Realtime, event driven notification engine to take timely action.

Students are presented with a hyper personalized environment that delivers real time information that allows her to take immediate action across a nearly unlimited number of tasks.



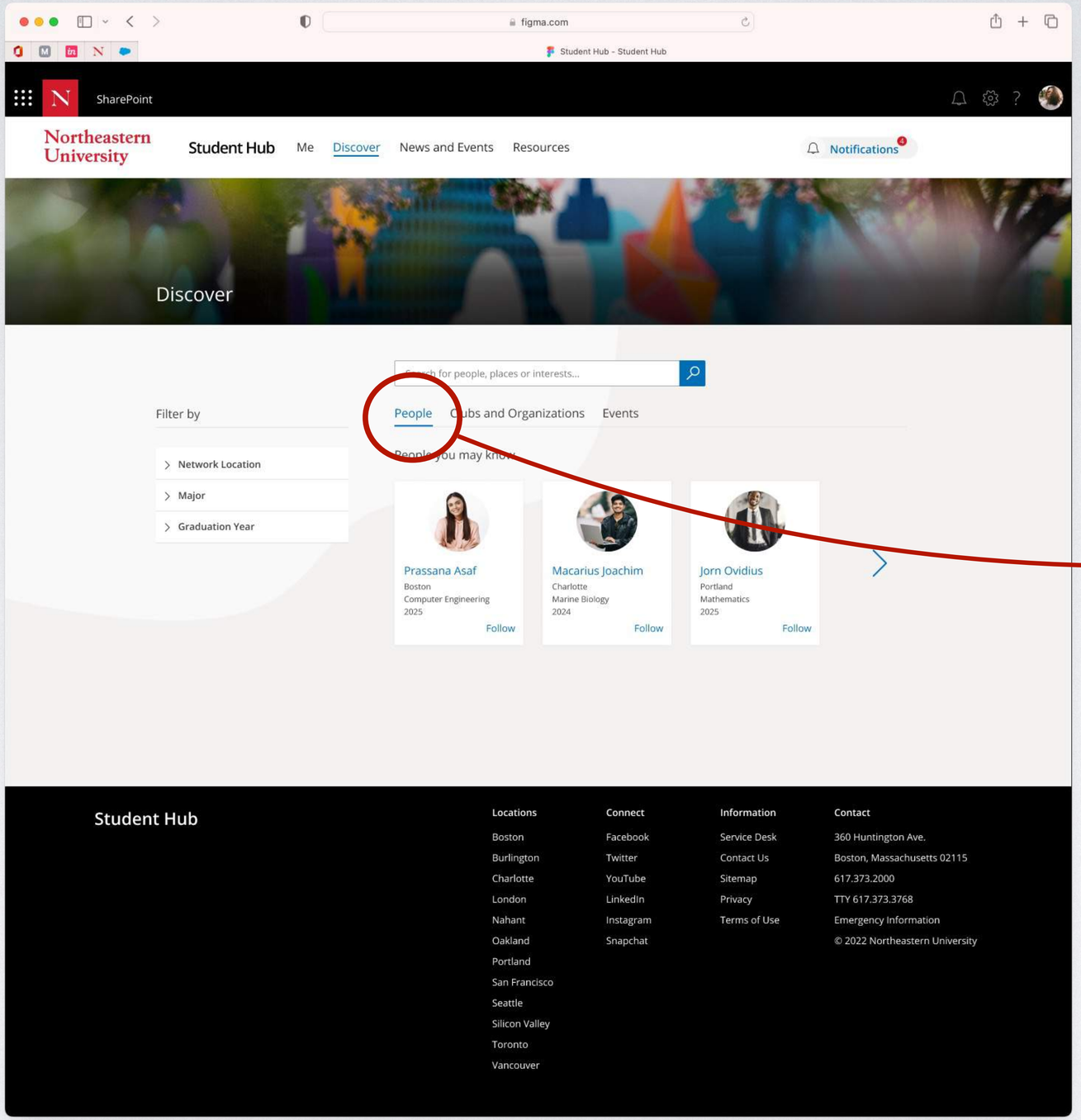
Access to cloud documents, email, service requests, etc.

Students are presented with a hyper personalized environment that delivers real time information that allows her to take immediate action across a nearly unlimited number of tasks.



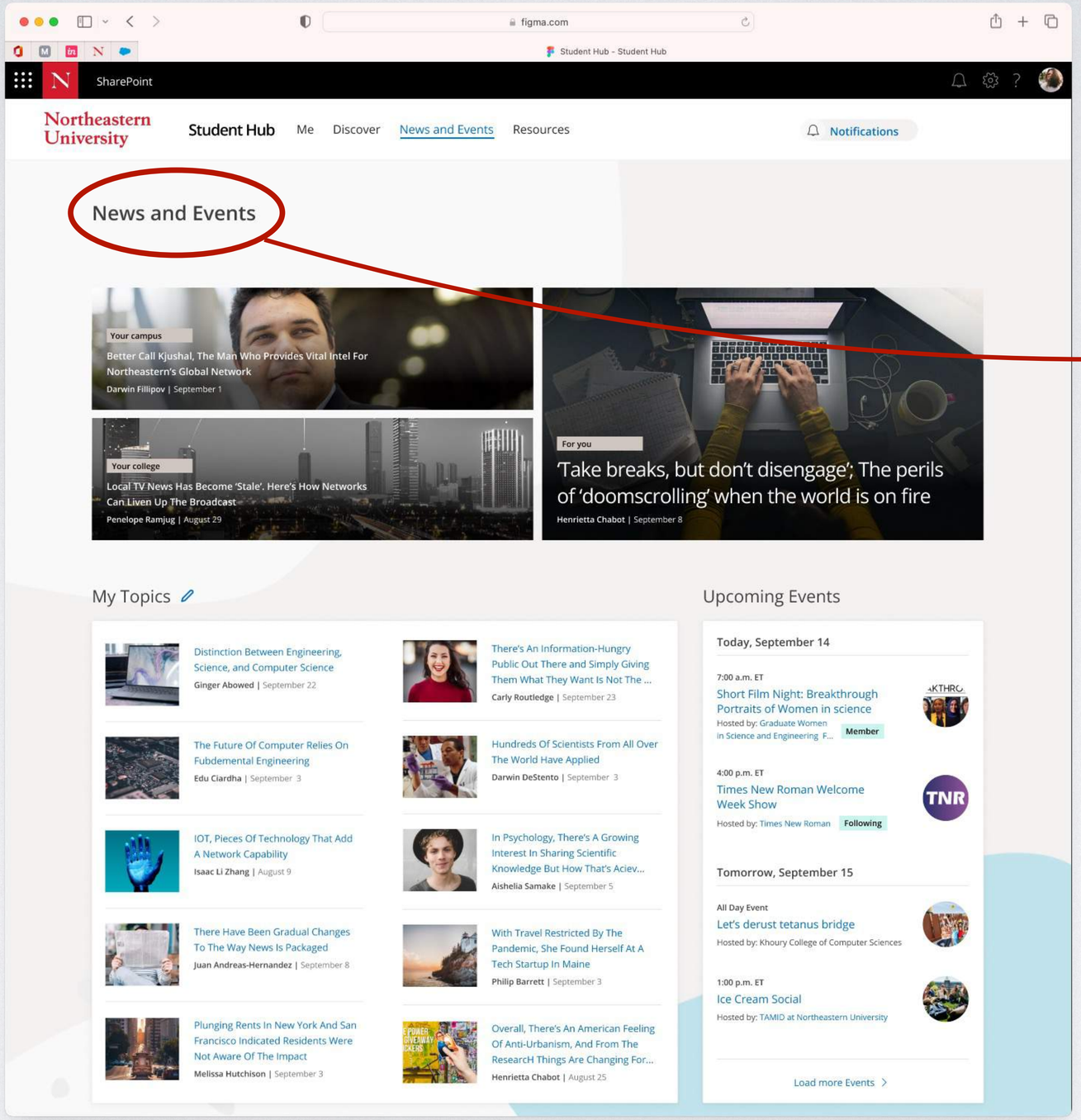
Personalization engine to drive recommendations.

Students are presented with a hyper personalized environment that delivers real time information that allows her to take immediate action across a nearly unlimited number of tasks.



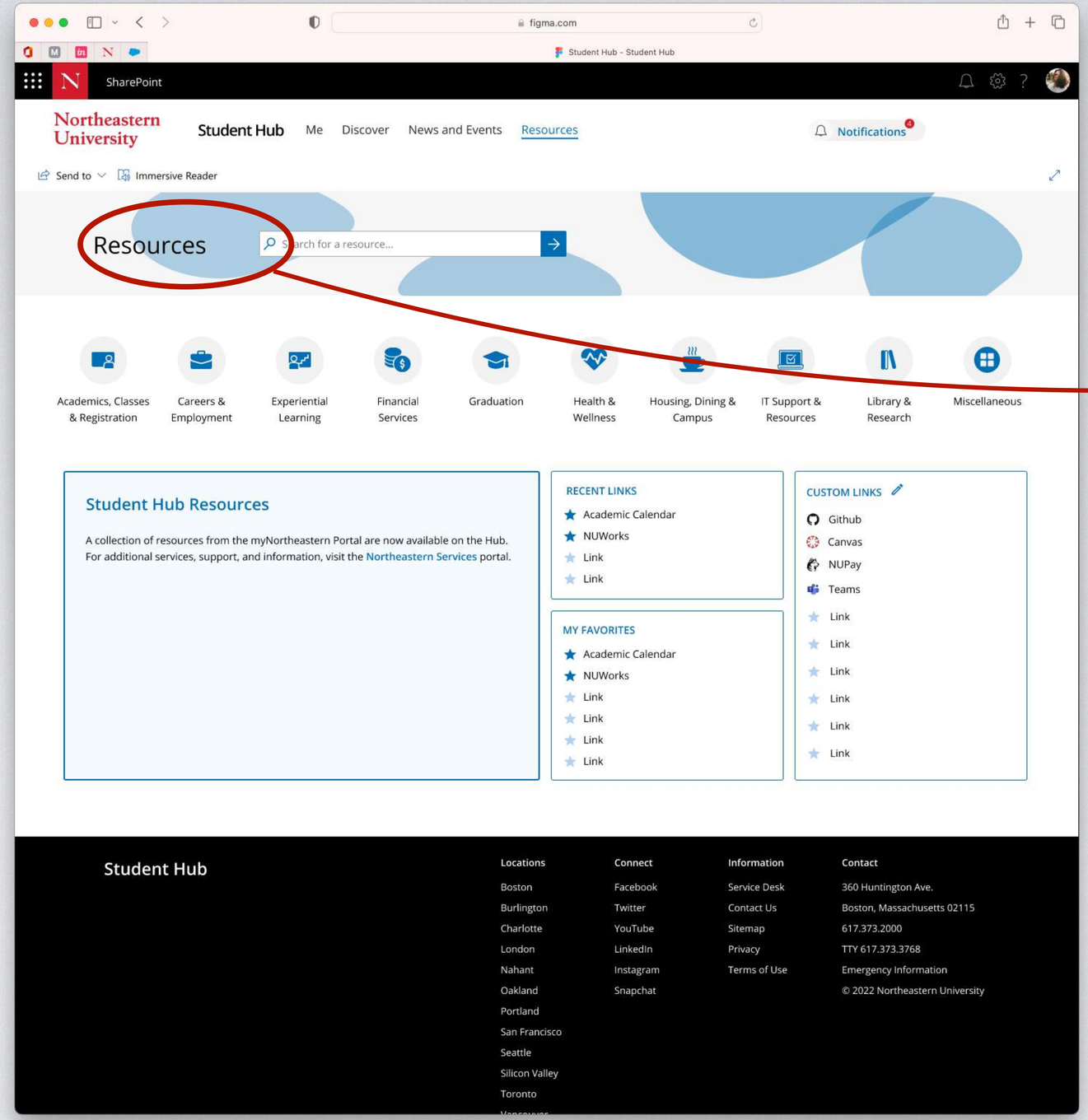
Personalization makes digital connections & recommendations.

Students are presented with a hyper personalized environment that delivers real time information that allows her to take immediate action across a nearly unlimited number of tasks.



Personalized delivery of news and events from across the Northeastern network.

Students are presented with a hyper personalized environment that delivers real time information that allows her to take immediate action across a nearly unlimited number of tasks.

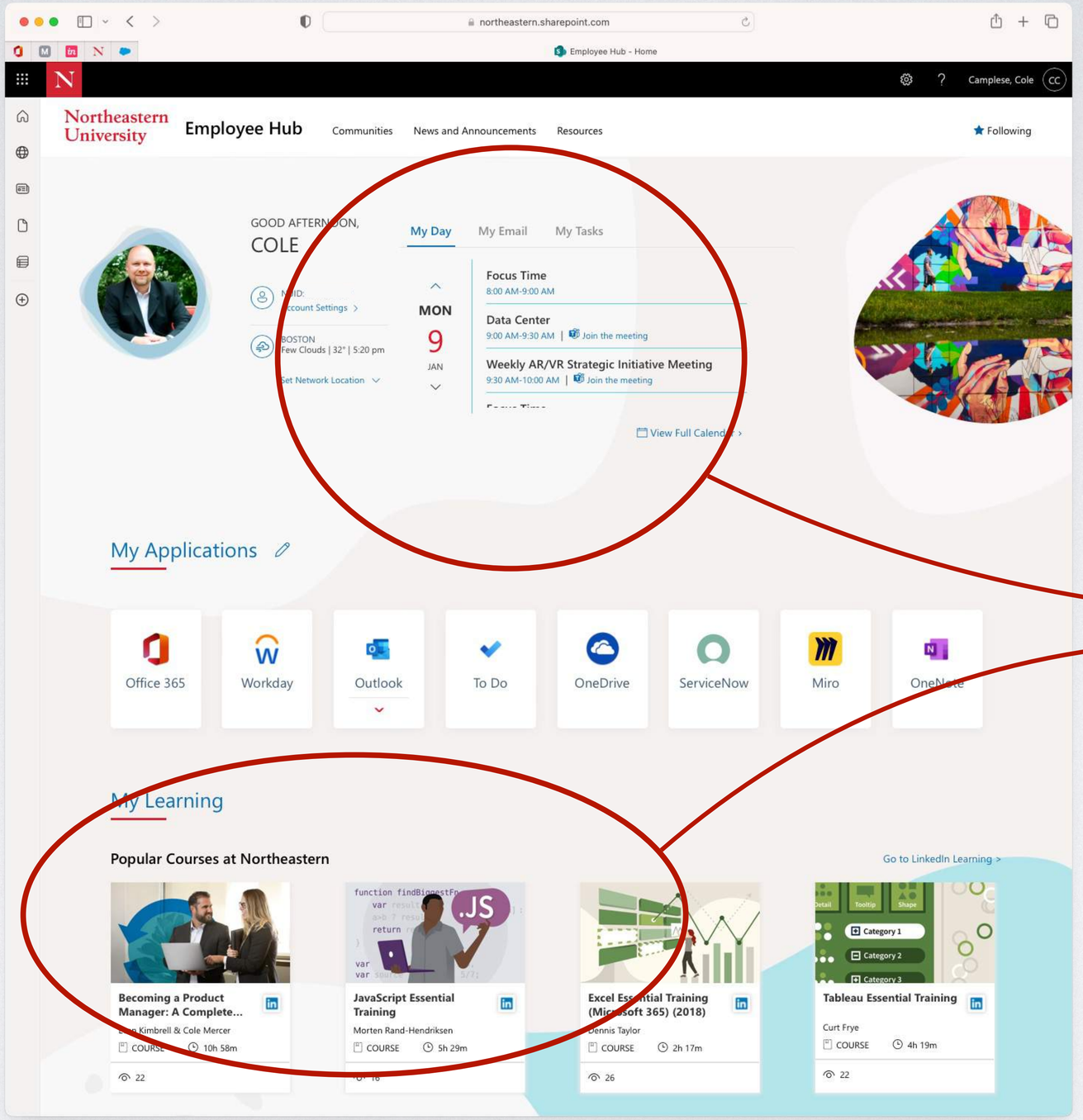


Personalized access to systems of record for taking immediate action across hundreds of platforms.

FACULTY & STAFF VIEW

https://me.northeastern.edu

An employee can customize their platform with the tools and resources they need to accomplish their specific work, to connect with members of the Global Network, grow their skills, and so much more in a completely personalized fashion.



Similar realtime integrations and recommendations.

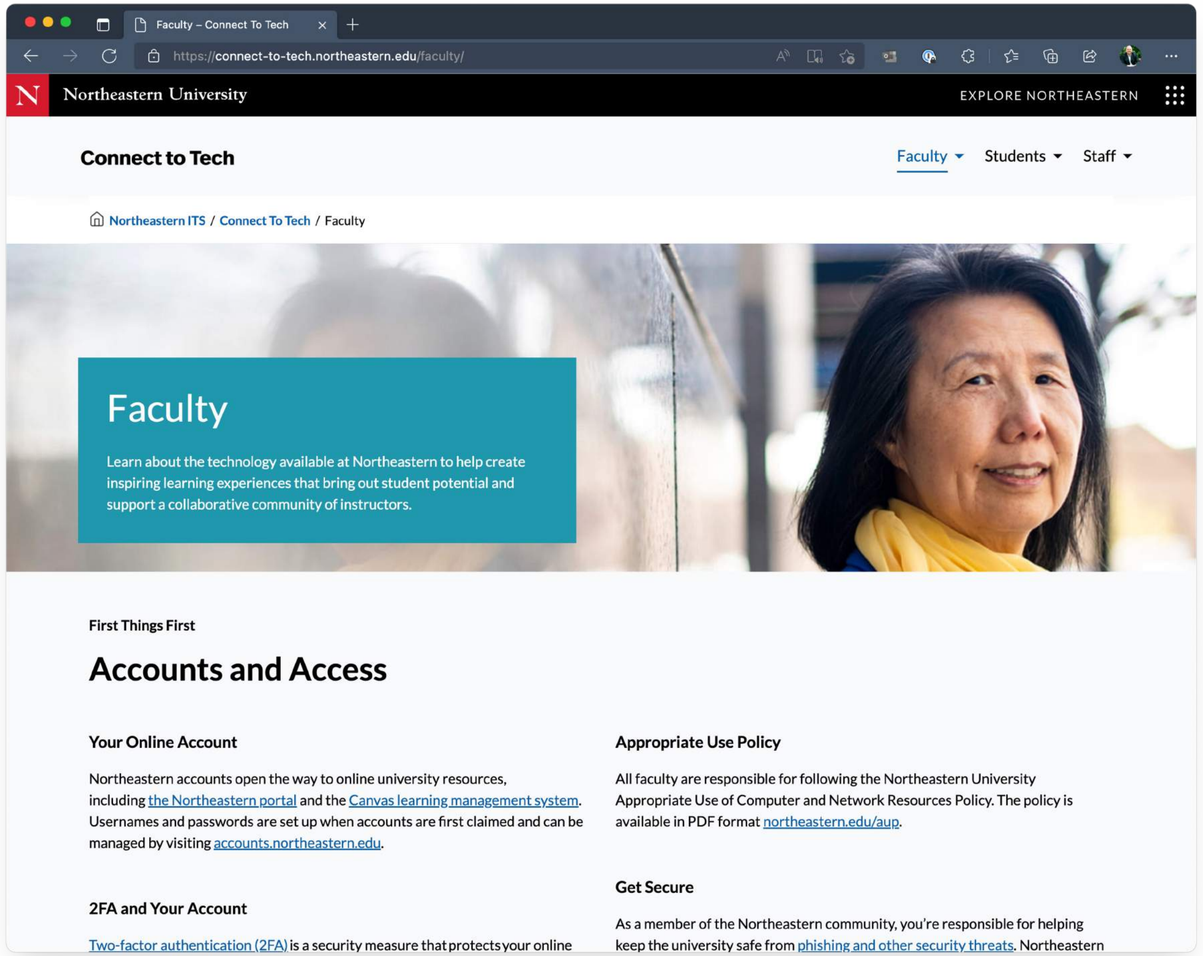
TEACHING AND LEARNING WITH TECHNOLOGY

FROM NEXT GENERATION CLASSROOM DESIGNS TO JUST IN TIME TEACHING SUPPORT.

TEACHING AND LEARNING WITH TECHNOLOG

ACADEMIC TECHNOLOGIES

- Helping you create engaging learning environments for your students through the effective use of digital media and educational tools.
- Supporting you in getting the most out of the learning management system at Northeastern.
- Solutions:
  - Canvas
  - Educational Technology Tools
  - Classroom Technology & Support
  - Training and Consultations



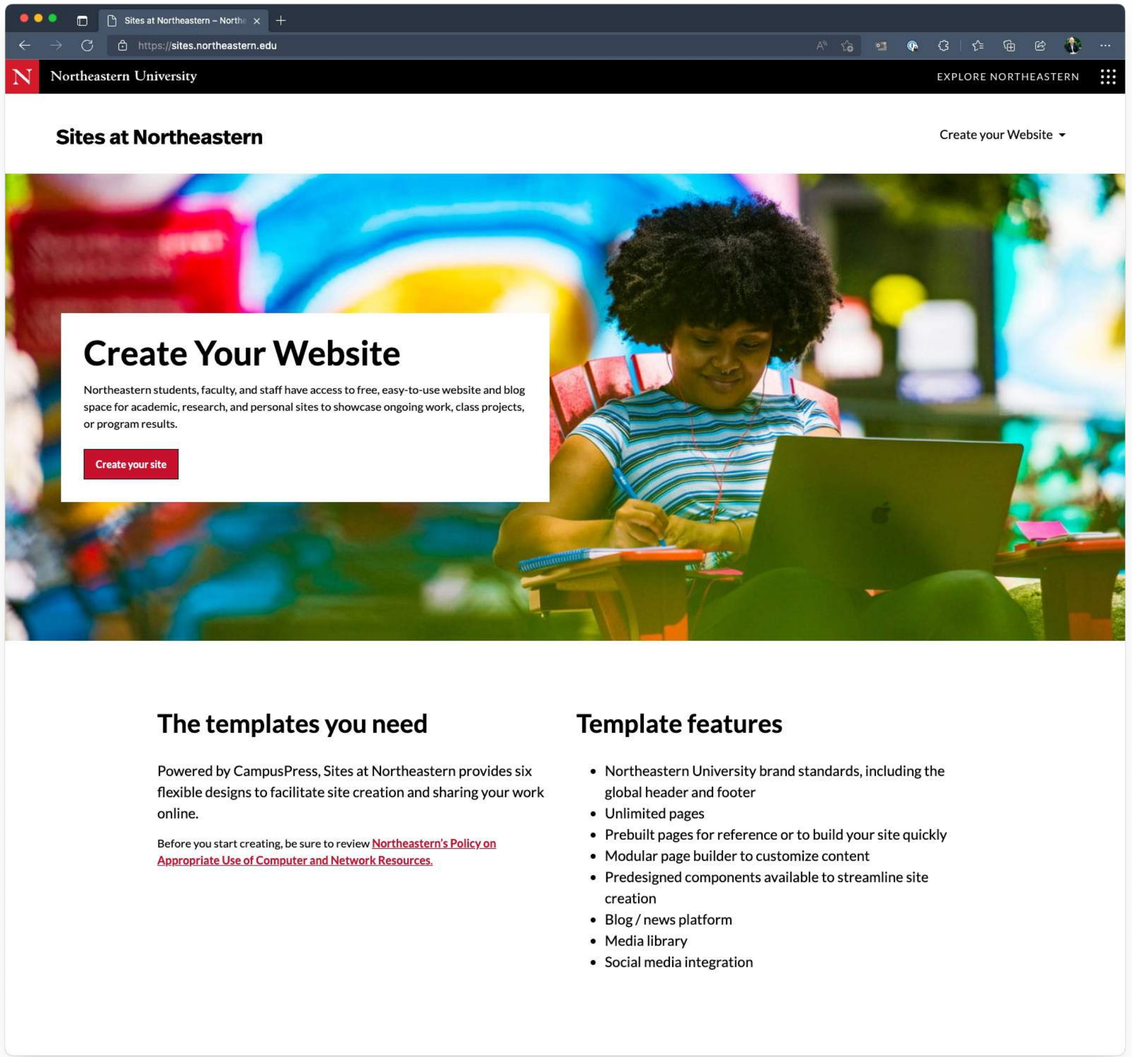
https://connect-to-tech.northeastern.edu/faculty/

SITES AT NORTHEASTERN

Sites at Northeastern

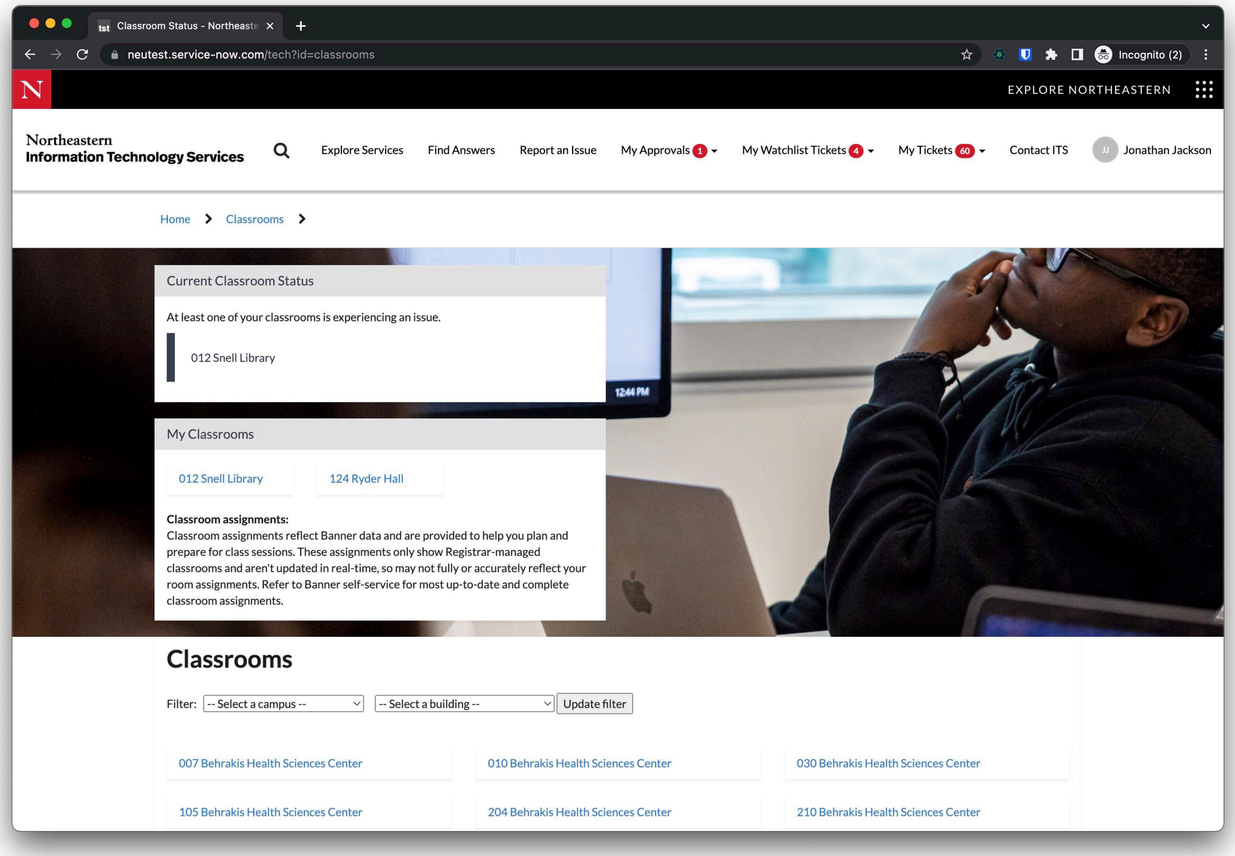
- 3,500+ Total Sites Hosted
- <30 Min. Time to Self-Publish Site
- 2,600+ Portfolio Sites Hosted
- 500+ Lab Sites Hosted

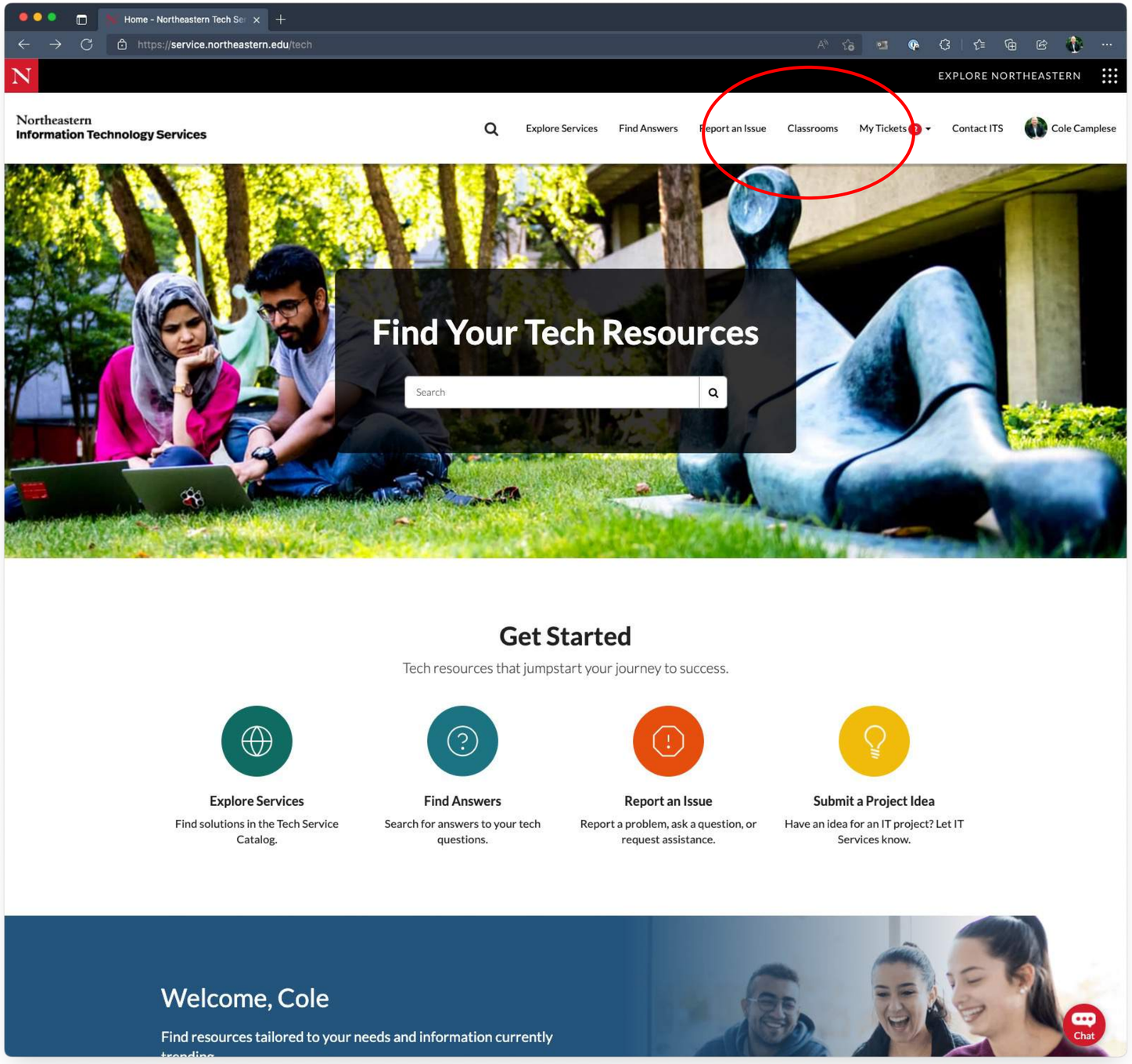
https://sites.northeastern.edu

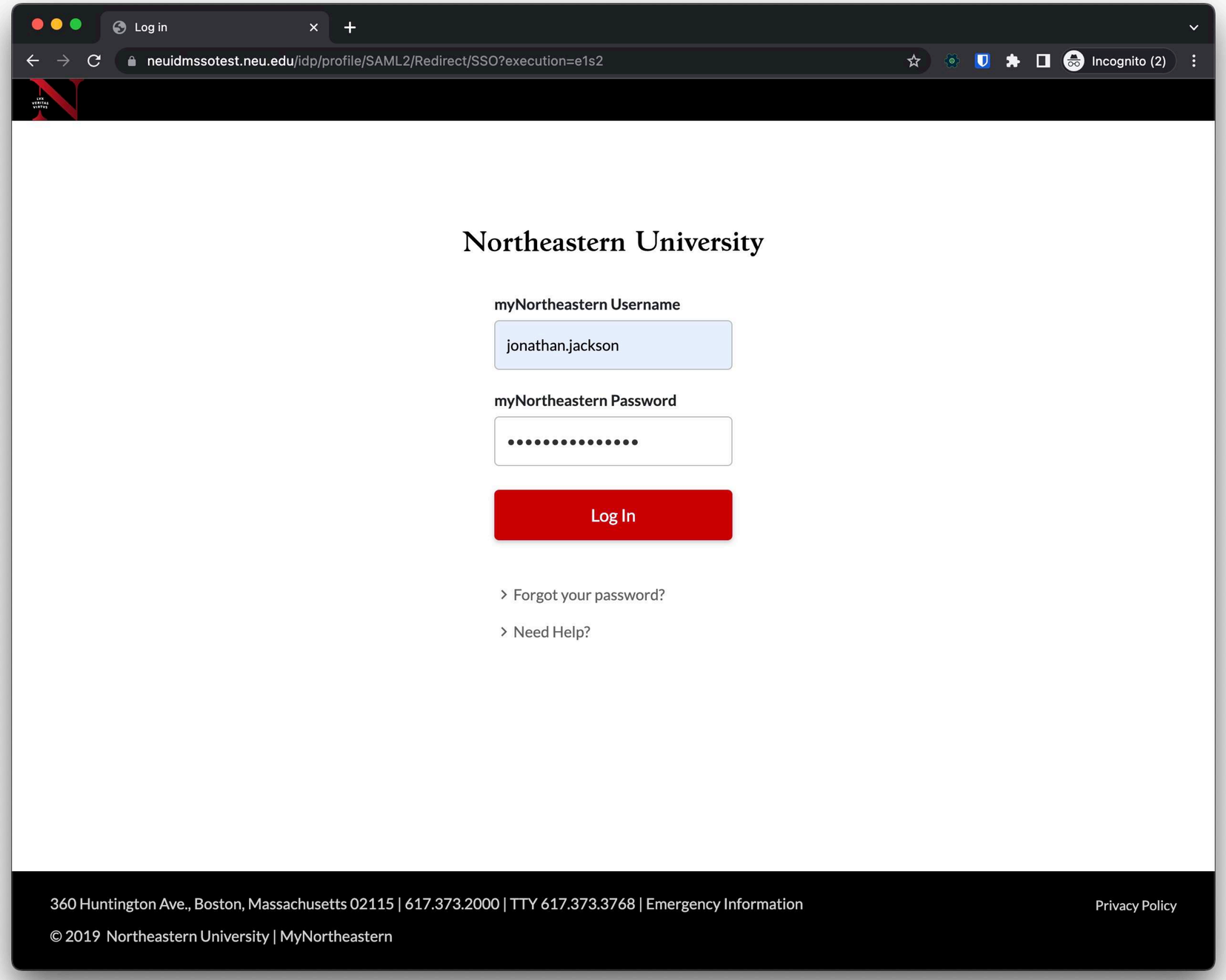


PERSONALIZED CLASSROOM DASHBOARD

- Available now , the new personalized faculty dashboard in ServiceNow provides an instant view into the health of your classroom
- For any reported issues, the classroom dashboard will provide details about the issues and associated time to remediation
- Next version will automatically notify faculty via email (and IM) if their specific classroom is experiencing any technical issues as soon as it is discovered
- https://service.northeastern.edu/tech > Classrooms




Home - Northeastern Tech Se
https://service.northeastern.edu/tech
EXPLORE NORTHEASTERN
Northeastern
Information Technology Services
Explore Services
Find Answers
Report an Issue
Classrooms
My Tickets
Contact ITS
Cole Camplese
Find Your Tech Resources
Search
Get Started
Tech resources that jumpstart your journey to success.
Explore Services
Find solutions in the Tech Service Catalog.
Find Answers
Search for answers to your tech questions.
Report an Issue
Report a problem, ask a question, or request assistance.
Submit a Project Idea
Have an idea for an IT project? Let IT Services know.
Welcome, Cole
Find resources tailored to your needs and information currently
Chat


Log in
neuidmssotest.neu.edu/idp/profile/SAML2/Redirect/SSO?execution=e1s2
Incognito (2)
Northeastern University
myNortheastern Username
jonathan.jackson
myNortheastern Password
Log In
Forgot your password?
Need Help?
360 Huntington Ave., Boston, Massachusetts 02115 | 617.373.2000 | TTY 617.373.3768 | Emergency Information
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Home - Northeastern Tech Ser

neutest.service-now.com/tech?id=tech_index_home

Incognito (2)

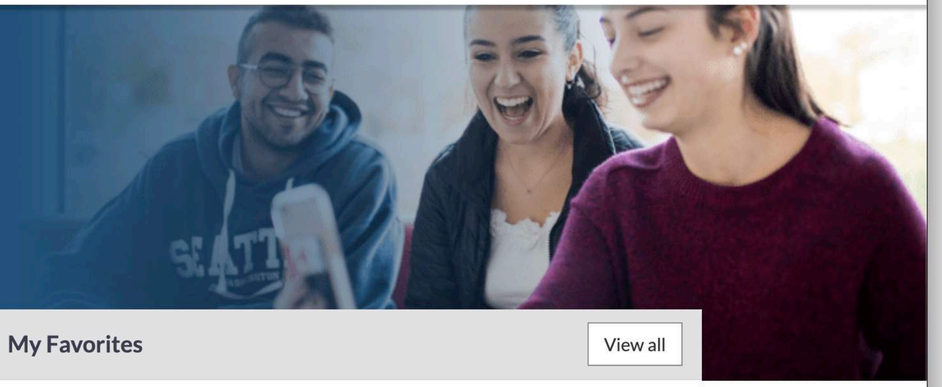
EXPLORE NORTHEASTERN

Northeastern
Information Technology Services

Explore Services | Find Answers | Report an Issue | My Approvals 1 | My Watchlist Tickets 4 | My Tickets 60 | Contact ITS | Jonathan Jackson

Welcome, Jonathan

Find resources tailored to your needs and information currently trending.



My Most Recently Viewed

View all

NU CMMC Access Control Policy v1.2
6 Views

My Favorites

View all

You haven't favorited any articles yet.

When viewing an article, use the "Save Favorite" button under the "Favorite Articles" section for quick access later.

My Classrooms

012 Snell Library

124 Ryder Hall

Classroom assignments:
Classroom assignments reflect Banner data and are provided to help you plan and prepare for class sessions. These assignments only show Registrar-managed classrooms and aren't updated in real-time, so may not fully or accurately reflect your room assignments. Refer to Banner self-service for most up-to-date and complete classroom assignments.

Current Classroom Status

At least one of your classrooms is experiencing an issue.

012 Snell Library

Chat

Classroom Details - Northeaste

neutest.service-now.com/tech?id=classroom_details&classroom=3a330b5347e11914b2a3daad436d43c5

Incognito (2)

EXPLORE NORTHEASTERN

Northeastern
Information Technology Services

Explore Services | Find Answers | Report an Issue | My Approvals 1 | My Watchlist Tickets 4 | My Tickets 60 | Contact ITS | Jonathan Jackson

Home > Classrooms > Ryder Hall 124 >

Search

Ryder Hall 124

Quick Guide PDF:	Updated NUFlex
Classroom Type:	Updated NUflex
Building Code:	RY

Technical Features

Cameras:	Instructor-facing camera Audience-facing camera
Camera and Audio Control:	Auto Tracking control Manual control
Control Panel:	Touch Panel
Microphone Features:	Echo Cancellation All room Mic coverage Ceiling Mics Wireless Mics
Wireless Display:	No

Northeastern University
Information Technology Services
360 Huntington Ave.
Boston, Massachusetts 02115

Need support?

Reach out to the IT Service Desk—available 24/7, no matter where you are.

Contact ITS

Classroom Status - Northeaste

neutest.service-now.com/tech?id=classrooms

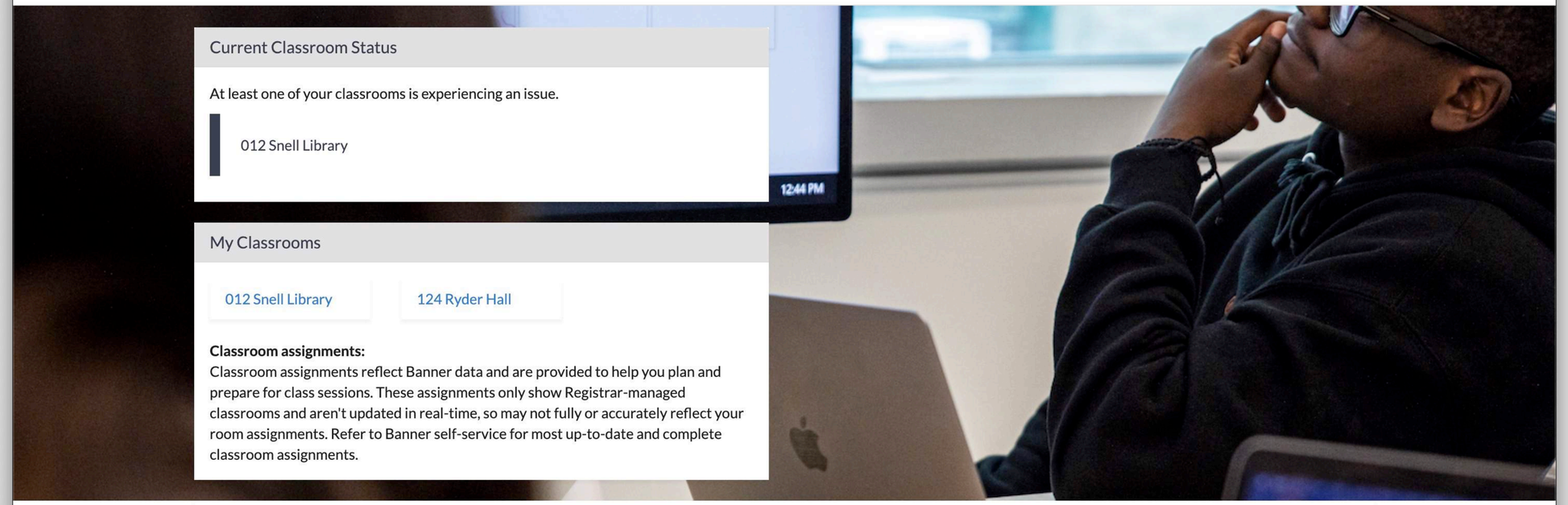
Incognito (2)

EXPLORE NORTHEASTERN

Northeastern
Information Technology Services

Explore Services | Find Answers | Report an Issue | My Approvals 1 | My Watchlist Tickets 4 | My Tickets 60 | Contact ITS | Jonathan Jackson

Home > Classrooms >



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012 Snell Library

My Classrooms

012 Snell Library

124 Ryder Hall

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Classrooms

Filter: -- Select a campus -- -- Select a building -- Update filter

007 Behrakis Health Sciences Center

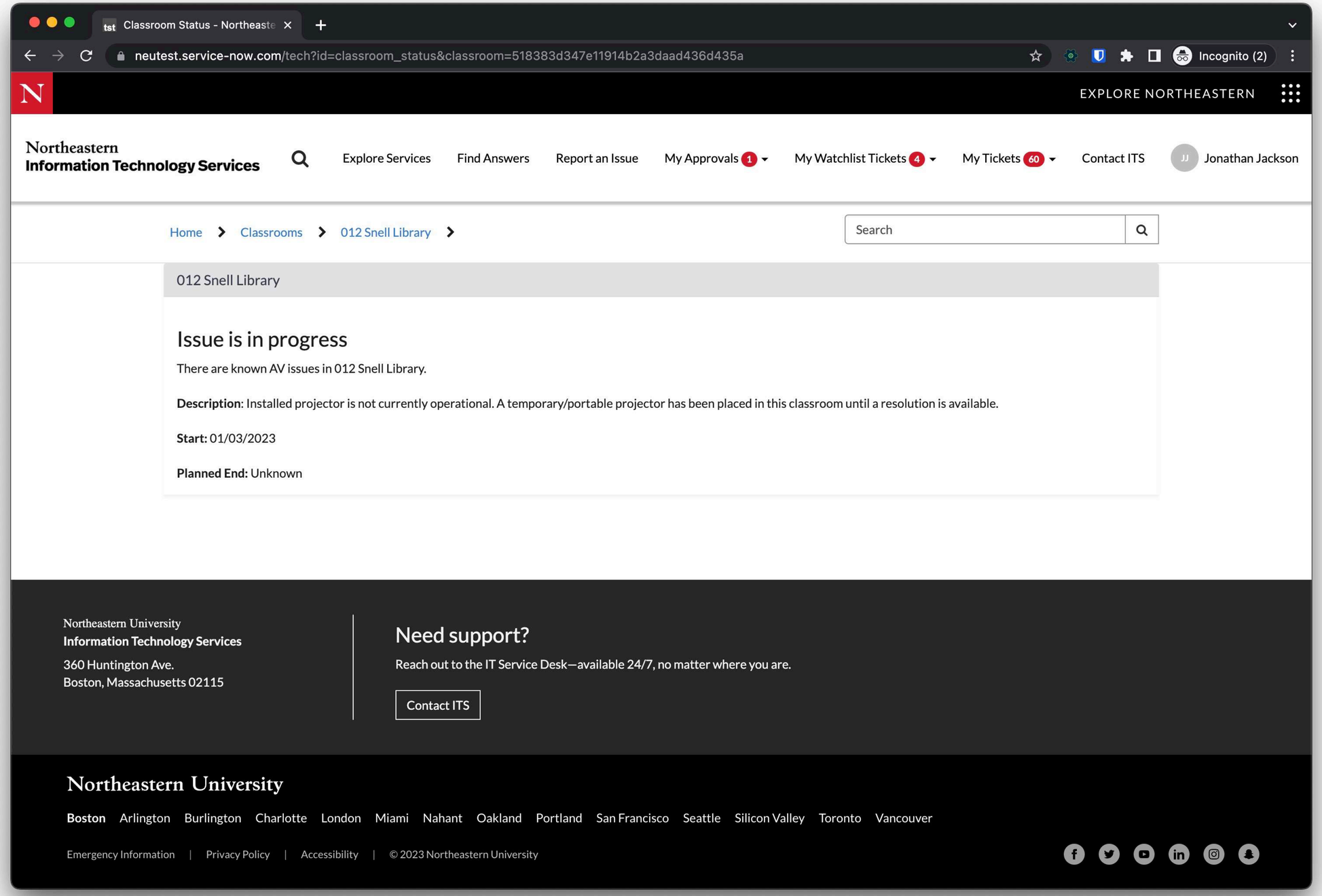
010 Behrakis Health Sciences Center

030 Behrakis Health Sciences Center

105 Behrakis Health Sciences Center

204 Behrakis Health Sciences Center

210 Behrakis Health Sciences Center


Classroom Status - Northeaste
neutest.service-now.com/tech?id=classroom_status&classroom=518383d347e11914b2a3daad436d435a
Incognito (2)
EXPLORE NORTHEASTERN
Northeastern
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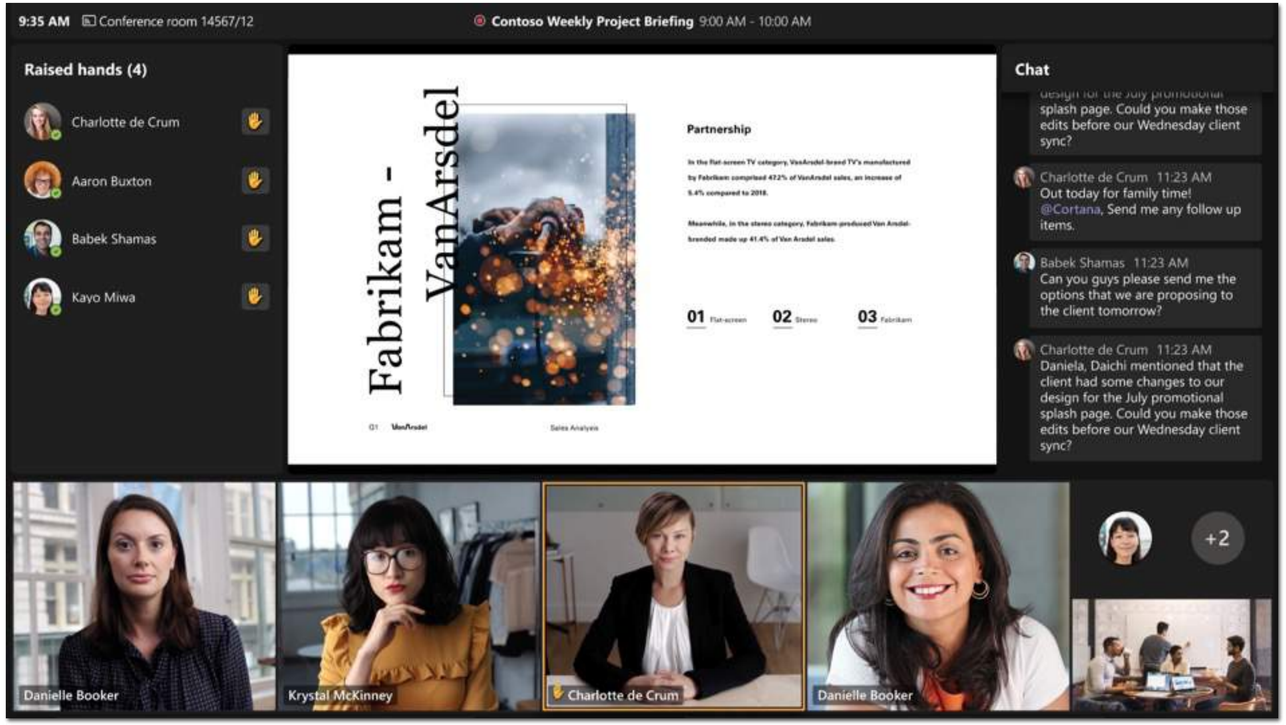
Explore Services
Find Answers
Report an Issue
My Approvals 1
My Watchlist Tickets 4
My Tickets 60
Contact ITS
Jonathan Jackson
Home
Classrooms
012 Snell Library
Search
012 Snell Library
Issue is in progress
There are known AV issues in 012 Snell Library.
Description: Installed projector is not currently operational. A temporary/portable projector has been placed in this classroom until a resolution is available.
Start: 01/03/2023
Planned End: Unknown
Northeastern University
Information Technology Services
360 Huntington Ave.
Boston, Massachusetts 02115
Need support?
Reach out to the IT Service Desk—available 24/7, no matter where you are.
Contact ITS
Northeastern University
Boston Arlington Burlington Charlotte London Miami Nahant Oakland Portland San Francisco Seattle Silicon Valley Toronto Vancouver
Emergency Information | Privacy Policy | Accessibility | © 2023 Northeastern University

GLOBAL CLASSROOMS

- There are 279 Registrar controlled classrooms in Boston, 180 are modernized to the 2020 standards. 56 in the Global Network and an additional 36 in Oakland.
- Global learning spaces (GLS) are found throughout the network: 22 in Boston, 20 in Oakland, 4 in Vancouver, 2 in Seattle, 1 in Burlington, 4 in Arlington, 4 in Miami
- Working on a strategy to accelerate GLS implementation across the Global Network

FRICTIONLESS CLASSROOMS

Powered by Microsoft Teams Room technology, we are deploying one-touch classroom AV technology. Designed for wireless participation across multiple locations with full O365 and Canvas integration.



CANVAS & TEAMS INTEGRATION

Faculty member clicks to sync their Canvas section with Teams.

Custom code creates a Microsoft Class Team and a Team meeting series is created with the course roster dynamically updated.

For courses with class times, students will receive a calendar invite, and it will appear on the Student Hub as well as Outlook.

In GLS classrooms, touch your name on the panel to start the Teams meeting and enable wireless sharing from your device of choice.

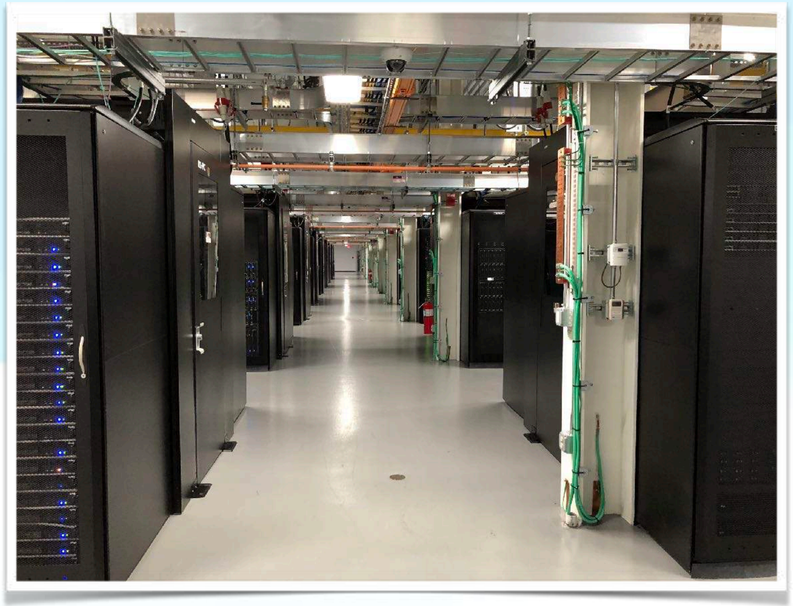
INNOVATIVE & FLEXIBLE LEARNING SPACES

RESILIENT, ROBUST GLOBAL INFRASTRUCTURE

CORE INFRASTRUCTURE THAT DIFFERENTIATES

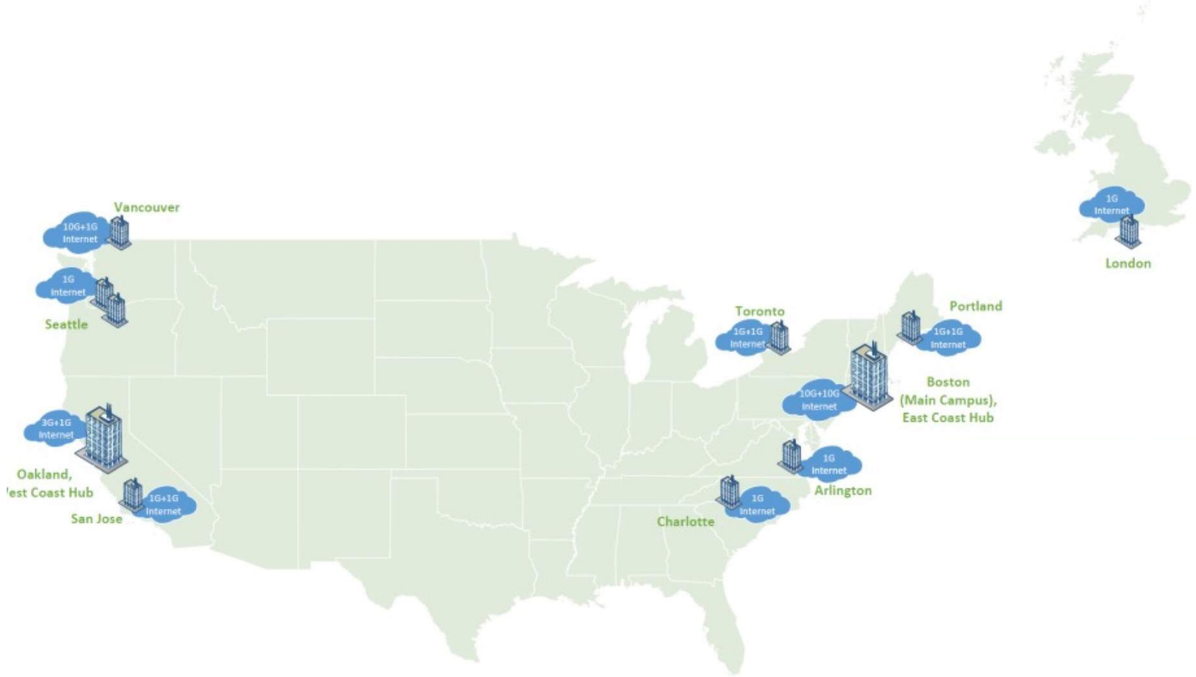
OUR ONGOING INVESTMENT IN THE UNDERLYING INFRASTRUCTURE IS AN ENABLER OF THE ACADEMIC PLAN.

NETWORK MODERNIZATION

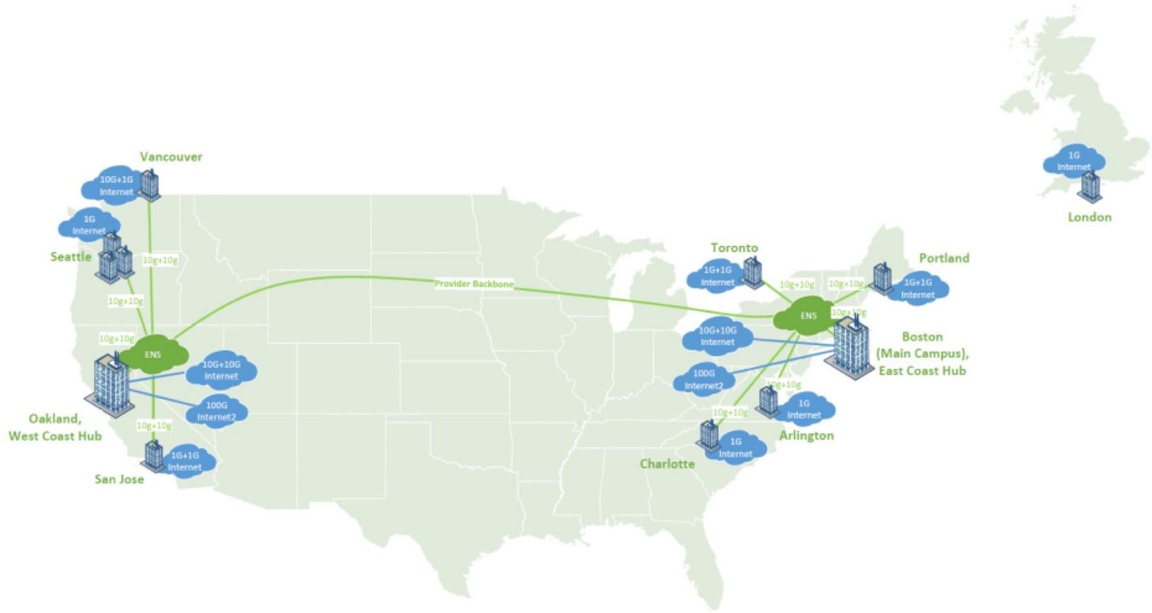


- Currently in year two of a five-year networking modernization program that prioritizes:
  - 10X reduction in time to science
  - Vastly improved wireless connectivity in Boston
  - Robust global connectivity
  - Providing a future proof, differentiated communications infrastructure
  - Enhanced global security posture to protect information assets across the Global Network
  - Massachusetts Green High Performance Computing Center (MGHPCC) on demand, regardless of location
- Will modernize the global communications infrastructure, while creating a robust and redundant architecture that takes advantage our unique global footprint

LEVERAGING OUR GLOBAL FOOTPRINT



Today

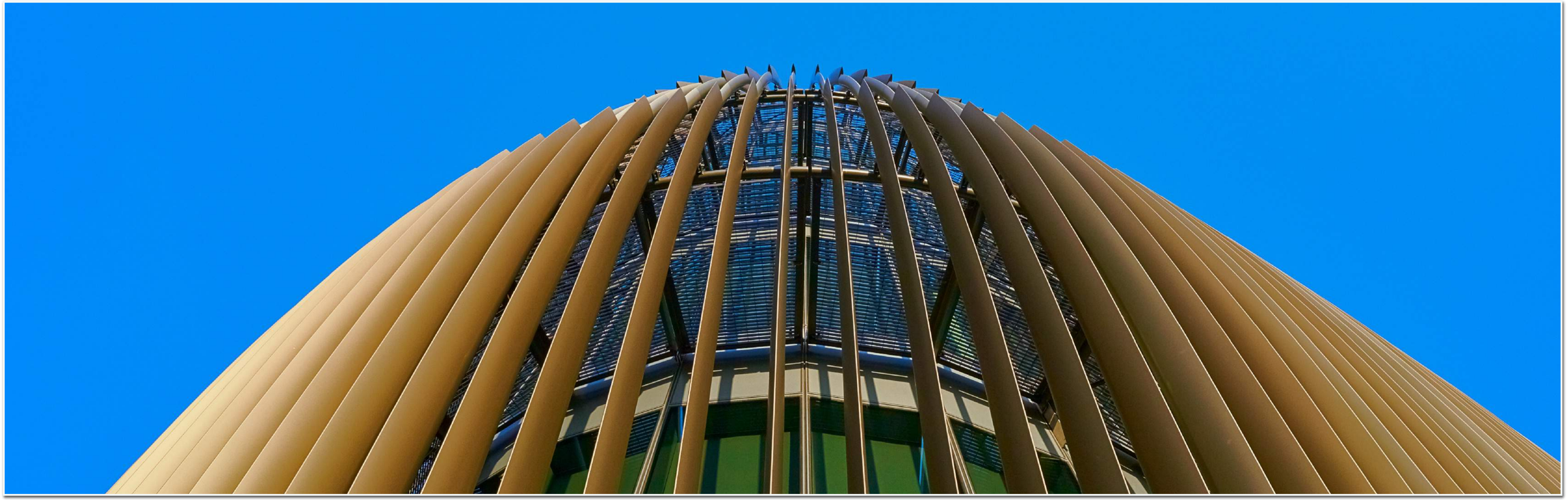


24 Months

GLOBAL RESEARCH COMPUTING SUPPORT

From under $50 million in grants in 2006 to over $200 million just fifteen years later, Northeastern has, in the blink of an eye, become one of the nation's premier universities for the exploration of the frontiers of knowledge. This recent ascent of our research enterprise will grow even further, and in new ways, under this strategic plan.

- 10 FTE & 6 graduate students dedicated to the needs of the research community
- Over 45,000 CPU cores and over 400 GPUs
- Provides over 12 PB of storage
- Training and support for the integration of computational computing into teaching and learning
- Both AWS and Azure cloud computing services are supported
- In the last 4.5 years we have gone from 200 unique users to 2,230
- 99.98% uptime of compute resources in 2022

https://rc.northeastern.edu/

CONVERSATION