

AI Solutions Hub

From Research to Production: Delivering State-of-the-Art AI Solutions for Real-World Problems

The **AI Solutions Hub** delivers tailored, end-to-end AI solutions that are practical, scalable, and designed for real-world use. Our solutions, built on Responsible AI principles, can be deployed both on-premise and in the cloud, driving high business value and ROI.

Why partner?

The Northeastern ecosystem gives you three advantages:

- **Breadth:** multi-disciplinary experts on call
- **Speed:** hands-on builders and co-ops
- **Longevity:** knowledge transfer and upskilling to evolve and own

“The EAI and Roux Institute team has been an incredible partner by seeking to understand our needs, then helping us build innovative solutions using safe and responsible AI practices. Their partnership has enabled us to advance our goals of deepening customer relationships and providing frictionless service.”

Bob Montgomery-Rice

President and CEO of Bangor Savings Bank

Solutions Include:

AI for Operations

- Document Processing
- Time Series Forecasting
- AI Agents for Automation

AI for Marketing

- Chatbots & AI Assistants
- Recommendation Systems
- Next-Best Product & Churn Models

AI for Risk & Compliance

- Credit & Risk Scoring
- Fraud Detection
- Compliance Monitoring

AI for Innovation

- Generative AI Applications
- AI Copilots
- Multi-Modal AI (text, image, voice, video)

Custom AI Solutions

- Bespoke Models
- Hybrid Predictive + Generative AI

AI Expertise

We deliver production-ready AI solutions built on the following core capabilities:

- Generative AI
- Predictive AI
- Large Language Models
- AI Agents
- AI Opportunity Roadmaps
- Experiential AI Upskilling
- End-to-End Solution Delivery
- Cloud Deployment

Why Teams Choose Us

We deliver AI that works now and builds capacity for later.

- **Built-for-you Solutions** Production-ready AI tailored to your business challenges
- **Research to Production** Solutions you can operationalize, backed by state-of-the-art innovation
- **Embedded Training** Equipping your teams to maintain and extend solutions

How We Deliver

We follow a time-tested methodology to deliver reliable, scalable AI solutions.

- Discover** Requirements Gathering & Solution Design
- Build** Bespoke Development of Responsible AI Models
- Iterate** Agile Delivery with DevOps, MLOps & CI/CD
- Deploy** Cloud and/or On-Premise Deployment
- Sustain** Knowledge Transfer, Training & Support

Partnering with us connects you to Northeastern's applied AI professionals, faculty, and elite co-op talent—so you can scale faster, de-risk decisions with research depth, and maintain momentum with a continuous pipeline of builders.

The Team



Omer F. Alis, PhD
Director, AI Solutions Hub



Ben Morse, PhD
Program Manager



Tim Weidinger
Head, Business Development



Sean Martin
Partner Manager



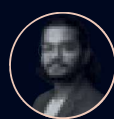
Kahan Dhaneshbhai Sheth
Data Scientist



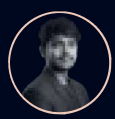
Shivram Nekkanti
Data Scientist



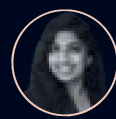
Akhil Chitreddy
Data Engineer



Jithin Veeragandham
Data Scientist



Vignesh Ramaswamy Balasundaram
Data Scientist



Reena Sajad Hyder
Data Scientist

For more information visit ai.northeastern.edu
or email AIPartnerships@northeastern.edu

The Roux Institute
Northeastern University

EAI The Institute for Experiential AI
Northeastern University

Working Lab

A Northeastern Experiential Program

Working Lab is a flexible, project-based consulting engagement that pairs interdisciplinary graduate student teams with industry partners to address specific business challenges. Supervised by a faculty expert, students deliver actionable insights and high-quality outputs tailored to the organization's goals. Working Lab offers a **strategic, cost-effective way to leverage top talent** while benefiting from faculty-led oversight and operational rigor.



How it works:

Tackle business problems

Deploy skilled graduate student teams supported by expert faculty advisors, without increasing headcount.

Build a talent pipeline

Gain new perspectives and skills through consultative work where you can trial new talent prospects in a work context.

Achieve tangible results

Gain actionable deliverables like software prototypes, data models, and strategic insights that drive measurable business outcomes.

Project Examples:

Verizon

Term: 6 months

Faculty: 1

Students: 6

Objective: Over the six-month experience, students are designing and developing a web-based application tailored to Verizon's internal specifications.

State Street

Term: 15-20 weeks

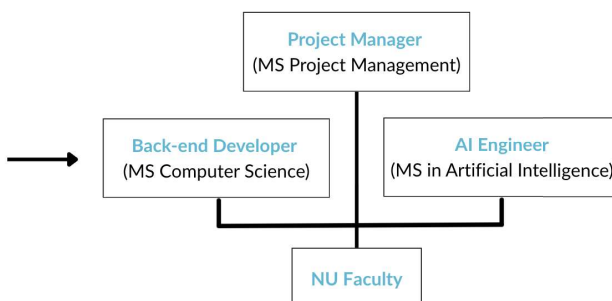
Faculty: 1

Students: 5

Objective: Over the six-month experience, students are designing and developing an automated dashboard (web application) based on State Street's identified KPIs.

Sample Team Scenario:

Objective:
Custom AI tool for
project estimating
and sales



Applied AI talent, deployed directly into your team

Forward-Deployed Engineers

Your team already knows where AI could save time. What's missing is the capacity and expertise to scope the opportunity, and the budget for a consultant or new hire to build a solution. We close that gap: a team of two vetted Northeastern graduate students works directly with your team to identify, scope, and prototype AI opportunities, at a fraction of the usual cost, and with expert oversight from our AI Solutions Hub. This is our talent model for AI. We call it Forward-Deployed Engineers (FDE).



WHAT YOU GET



Get a real deliverable

Each workstream ends in a concrete output: a prioritized list of opportunities, a requirements document, or a working prototype.



Work with vetted talent

Every Northeastern FDE completes a dedicated certification program before engaging with a partner. An AI Solutions Hub technical lead owns scope, milestones, and delivery throughout.



Move at the right pace

Engage Northeastern FDE students for a single workstream, or a full path from discovery through prototype. Each workflow stands on its own or builds toward the next.

FROM AI AMBITION TO A REAL DELIVERABLE



Discovery



Requirements



Working
prototype

SEE THE PATH

roux.northeastern.edu

HOW IT WORKS

Engage at the stage that matches your readiness.

Engagements can run as a single stand-alone workstream or as a full path from discovery to prototype. Most partners move through the workstreams in order, though you can enter at a later stage if you've already done earlier-stage work.

WORKSTREAM	LENGTH	WHAT YOU GET
Workstream 1: Discovery & Prioritization	4 weeks	We interview your team and observe how AI could fit into your workflows, then hand you a shortlist of your most promising opportunities, organized by impact and complexity.
Workstream 2: Scoping	4–6 weeks	We take one workflow you've already identified and turn it into a clear, actionable set of requirements: what it needs to succeed, who's involved, and what's technically feasible.
Workstream 3: Scoping & Prototyping	6–8 weeks	We build a working demo of your highest-priority workflow so you can see it in action before committing to a full build. Not production-ready, but real enough to test the idea.

THE TEAM *Expert oversight, certified graduate talent, and one accountable partner team.*

AI Solutions Hub Technical Lead

Owns scope, milestones,
and delivery

Forward-Deployed Engineers

Northeastern grad students,
deployed virtually into your
environment

You

Weekly check-ins and a
single point of
accountability throughout

GET STARTED

We're scheduling our first cohort of FDE partners now. If there's an AI opportunity your team hasn't had the bandwidth to scope, or a workflow you're ready to test in the real world, let's talk.

SCHEDULE A MEETING ➔



About Northeastern University

Founded in 1898, Northeastern is a global research university and the recognized leader in experiential lifelong learning. **Our approach of integrating real-world experience with education, research, and innovation empowers our students, faculty, alumni, and partners to create worldwide impact.**

Our global university system provides our community and academic, government, and industry partners with unique opportunities to think locally and act globally. The system—which includes 13 campuses across the U.S., U.K., and Canada, 300,000+ alumni, and 3,000 partners worldwide—serves as a platform for scaling ideas, talent, and solutions.

Northeastern's personalized, experiential undergraduate and graduate programs lead to degrees through the doctorate in 10 colleges and schools across our campuses. Learning emphasizes the intersection of data, technology, and human literacies, uniquely preparing graduates for careers of the future and lives of fulfillment and accomplishment.

Our research enterprise, with an R1 Carnegie classification, is solutions oriented and spans the world. Our faculty scholars and students work in teams that cross not just disciplines, but also sectors—aligned around solving today's highly interconnected global challenges and focused on transformative impact for humankind.

Northeastern at a glance*

\$282M in external funding

28 faculty awards for early career achievement, including 13 NSF CAREER awards

17K+ undergraduates in fall 2022

22K+ learners in graduate degree and certificate programs

13K+ co-op placements at 3,500+ co-op employers globally

**Stats are for 2022 unless otherwise noted.*

A global university system



- Boston
- Arlington
- Burlington
- Charlotte
- London
- Miami
- Nahant
- Oakland
- Portland
- Seattle
- Silicon Valley
- Toronto
- Vancouver

13 campuses in the U.S., U.K., and Canada

3,500+ partners worldwide

300k+ alumni worldwide

3,000+ employers across the globe