

A stylized blue lighthouse graphic is positioned on the left side of the slide, with yellow sunburst rays emanating from behind it. The lighthouse has a square tower with a small window, a lantern room, and a weather vane on top.

From Algorithms to Impact

AI for Everyone

Wei Ding

Paul English Applied AI Institute

UMass Boston

*AI for Cybersecurity Education via an LLM-enabled Security Knowledge Graph
February 16, 2026*

2026 Cybersecurity, AI, and Education Workshop • NSF SaTC: EDU #2335666



The background features a stylized illustration of a lighthouse on the left, with yellow sun rays emanating from behind it. The lighthouse is light blue with a white top section. The sun rays are yellow and white, creating a bright, energetic atmosphere. The text is centered in a white box with an orange background.

What's your biggest
challenge in AI education
right now?



Celebrating 50 Years of Core Mission Success

Best R1 university at providing access



As the city's only public univ., UMB anchors MA's workforce, with 80% of alumni staying local.



3rd most diverse university in the nation



2026




Why this talk today



AI is moving faster than curricula.

The hard part is not novelty—it's **durable learning** at scale.

AI novelty is abundant. What's rare is a repeatable system that reliably turns diverse students into capable, skeptical, ethical builders—semester after semester.



The Paul English Applied AI Institute is instrumental in preparing our students and other members of the UMass Boston community for a world in which AI will inevitably continue to grow and shape industries and daily life.”

— Wei Ding, Paul English Applied AI Institute Executive Director



In 2025, Prof. Ding received the IEEE Big Data Security Leadership Award for Outstanding Leadership and Technical Contributions in Big Data and Security both in Academia and Government. Prof. Ding is the only UMass Boston faculty member who has been elevated to the status of IEEE Fellow—a distinction awarded to select IEEE members for extraordinary accomplishments across IEEE's fields of interest. Her work in AI was recently featured in *UMass Boston Research* magazine in an article titled “Artificial Intelligence: Shaping the Future.”



Our north star



Accessible, rigorous, applied AI education—
across disciplines.

we're not training button-pressers. We're training
builders with judgment—people who can deliver
something real, and explain why it deserves to be
trusted.

Image credit: DreamsTime

PAUL ENGLISH APPLIED ARTIFICIAL INTELLIGENCE INSTITUTE
STUDENT ADVISORY COUNCIL

AI WORKSHOP SERIES

The Paul English Applied Artificial Intelligence Institute and Student Advisory Council are hosting the AI Workshop Series, a **six-session** program designed to **empower** UMass Boston students to **use AI intentionally and responsibly**.

WORKSHOP SCHEDULE

LinkedIn Optimization

Feb 17th, 2026
3:00-5:00 PM

Data Mining

Feb 24th, 2026
3:00-5:30 PM

GitHub

March 5th, 2026
3:00-5:00 PM

Prompt Engineering

March 26th, 2026
3:00-5:00 PM

ML of Structured Data

April 1st, 2026
4:30-6:30 PM

Applied LLMs

April 9th, 2026
3:00-5:00 PM

LOCATION FOR ALL WORKSHOPS: HEALEY LIBRARY (UL) MAC-A-LAB

REGISTER NOW!



LIMITED SEATS AVAILABLE

ai.umb.edu



A simple design pattern that scales

One central idea per session.

One lab that forces real decisions.

One short debrief: what worked, what broke, what we'll change.

One transfer example in a new domain: the principle travels.

The institute model we built

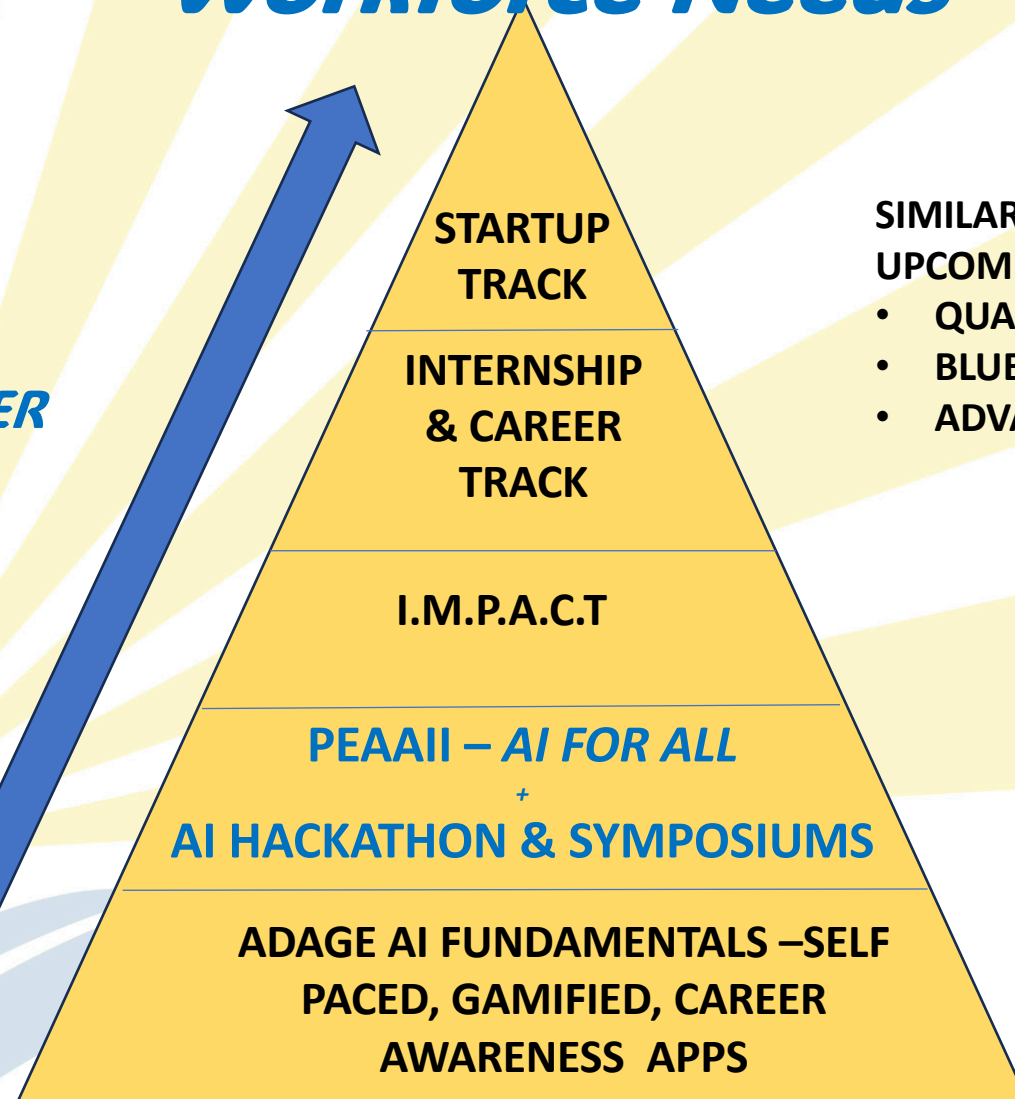
A hub connecting students, faculty, partners, and community.
Shared infrastructure + repeatable programming.

Pipeline: beginner → builder → leader.

We built a system where AI learning is not a one-off event—it's a durable pathway, supported by community, powered by students, and strengthened by repetition.

Preparing Students for Changing Workforce Needs

**INTEGRATED
UMB
PATHWAYS
FOR AI CAREER
&
VENTURE
SUCCESS!**



SIMILAR CONSTRUCT FOR UPCOMING WFD INITIATIVES

- QUANTUM
- BLUETECH
- ADVANCED MANUFACTURING

Paul English Applied AI Institute

AI for Everyone

“Paul is somebody who puts into action what he believes, and his values guide his work. **That has been such an inspiration** to me and to so many.”

— Joseph B. Berger,
UMass Boston Provost



- **Mission:** Equip students at Boston’s only public research university with the **AI fluency** and **applied experience** to thrive in an AI-shaped economy—and ensure opportunity is widened, not narrowed, by this transition.



Paul English Applied AI Institute

Student Advisory Council

- **Our Model:** A distinctive “expert-led, student-powered” approach.
 - faculty and industry set the standards and rigor
 - students co-create and scale real-world solutions

Keeping access broad, outcomes practical, and impact grounded in community needs.

Paul English Applied AI Institute

AI Literacy at Scale



- **Signature Course (AI for All):** Hybrid, cross-listed to maximize access, taught by multiple professors and industrial from different discipline.
- **Learning-by-doing:** teams built a generative AI application (one-semester long) to solve a real productivity pain point; projects presented at the public AI Frontier symposium, with VDC mentorship to continue.
- **AI micro-credentials:** competency-based, short and flexible programs of study designed to develop specific demonstrated skills.

Paul English Applied AI Institute

Hackathon, Symposium, and the New AI Computer Lab



- **AI Application Hackathon**
- **AI Frontier Student Research & Career Symposium**
- **AI Computer Lab (under construction)**



From algorithms to impact

1. Pressure-test growth opportunities
 - Which 2–3 opportunities should we prioritize?
 - What should we pause or stop to stay focused?
2. Partnership strategy
 - Which sectors/partners should we prioritize this year?
 - Are there 2–3 introductions that would accelerate progress?
3. Student signature experience
 - What should be the “must-have” experience every PEAll student can point to?
4. Narrative and visibility
 - What story about PEAll should we amplify in 2026?
 - What message will resonate most with students, employers, and the community?

Take-home message

Access: Lower barriers without lowering standards.

Rigor: Teach evaluation, reproducibility, and skepticism early.

Impact: Anchor learning in real problems, real partners, and real communities.

Closing line:
Build builders, not button-pressers.