

The Honda – Ohio State Partnership: Upskilling the Workforce for AI-Powered Work



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Concept:

Honda + OSU faculty + AI industry practitioners work together in a collaborative innovation space on campus to regularly experiment, engage, and co-mentor project teams that develop innovative AI workflows suitable for intrapreneurial integration into a company

HONDA



THE OHIO STATE UNIVERSITY

Honda – OSU AI Commons

Safely build, experiment, test, and validate AI innovations in a joint environment between OSU & Honda



- Strategy Development
- In-vehicle features
- Manufacturing & Supply Chain
- After Sales
- Enabling Tech (SOC,...)

HONDA

Honda
Expanding
AI



**THE OHIO STATE
UNIVERSITY**

New
AIx Hub



High Strategic Alignment

- Health
- Foundational
- Science & Engineering
- Responsible AI
- Agriculture
- Cyber Security

AI Digital Proving Ground

Key Expected Benefits:

Talent Pipeline
& Education



Innovation
at Scale



Expanded
Research Fields



Leveraging Emerging
AI Ecosystems

Mutual
Growth





Learning & Research Capability

Capability Tiers

- **Tier 1 – AI Literacy:** Short, immersive “AI for Everyone” bootcamps. Associates learn to co-pilot daily tasks with AI (e.g., automation, ideation, decision support).
- **Tier 2 – Applied Innovation:** Cross-functional project squads (mix of OSU students + Honda associates) solving domain problems — from factory optimization to customer experience.
- **Tier 3 – Deep R&D:** A selective program where Honda associates spend 12-24 months embedded at OSU labs, driving frontier research (multi-agent systems, edge AI for mobility, etc.).



AI for me → individual productivity and literacy.



AI with team → team-based problem solving, innovation culture.



AI for Honda → leadership in research and strategy.

The 3 tiers will enable Organization transformation in the AI x Software era



Tier 1 - AI Literacy - individual productivity and literacy

Goal: *Every associate becomes AI-fluent enough to augment their own work.*

Ideas:

- **Micro-Certifications:** Short, stackable credentials (e.g., “Prompt Engineering Essentials,” “AI in Excel,” “Ethical AI 101”).
- **AI Builder Clinics:** Hands-on labs where associates bring their *own work problems* (reports, emails, analysis tasks) and learn how to tackle them with AI tools in a safe environment.
- **AI Proving Ground:** Digital Sandbox environments with curated datasets/tools where associates can safely experiment without fear of “breaking production.”
- **Peer-to-Peer Learning Circles:** Associates form small cohorts to share how they’re applying AI in daily workflows — spreading grassroots adoption.

Honda Benefit: Associates experience value in a “learning” environment -> **PRODUCTIVITY** gains

OSU Benefit: Gains a scalable “learning” platform to extend its Education impact directly into industry settings

AI Jumpstart for Honda Executives @ OSU

Using AI with Judgment, Discipline and Impact

AI JUMPSTART FOR HONDA

From AI Access to AI Fluency

A one-day experience designed to move
you from AI passenger to AI driver.

Today's Journey	
8:30-9:00 AM	INTRODUCTIONS AND HONDA CONTEXT
9:00-10:00 AM	PERFORMANCE: WHY AI MATTERS, AND WHY AI IS NOT THE OUTCOME
10:00-10:15 AM	BREAK
10:15-11:15 AM	DRIVER: WHY THE CAR IS NOT THE ADVANTAGE. THE DRIVER IS
11:45-12:15 AM	USE: HOW TO GIVE AI BETTER DIRECTION
12:15-1:00 PM	LUNCH
1:00 -2:00 PM	THINK: USE AI TO MAKE BETTER DECISIONS THROUGH BETTER THINKING
2:00-3:00 PM	SOLVE: HOW TO STRUCTURE HARDER PROBLEMS WITH AI
3:00-3:30 PM	BREAK
3:30-4:30 PM	LEAD: HOW INDIVIDUAL AI FLUENCY BECOMES THE CATALYST FOR ORGANIZATIONAL AI FLUENCY
4:30-5:00 PM	INTEGRATION: WHAT LEADERS WILL ACCEPT, REVISE, REJECT, AND PRACTICE
5:00-5:15 PM	DAY 2 SETUP AND PROGRAM BREAK

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Facilitated by **Srini Koushik** in collaboration with Fisher College of Business
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GCSE: Orchestrating Complex Challenges

For hard problems, give AI the mission before asking for the output.

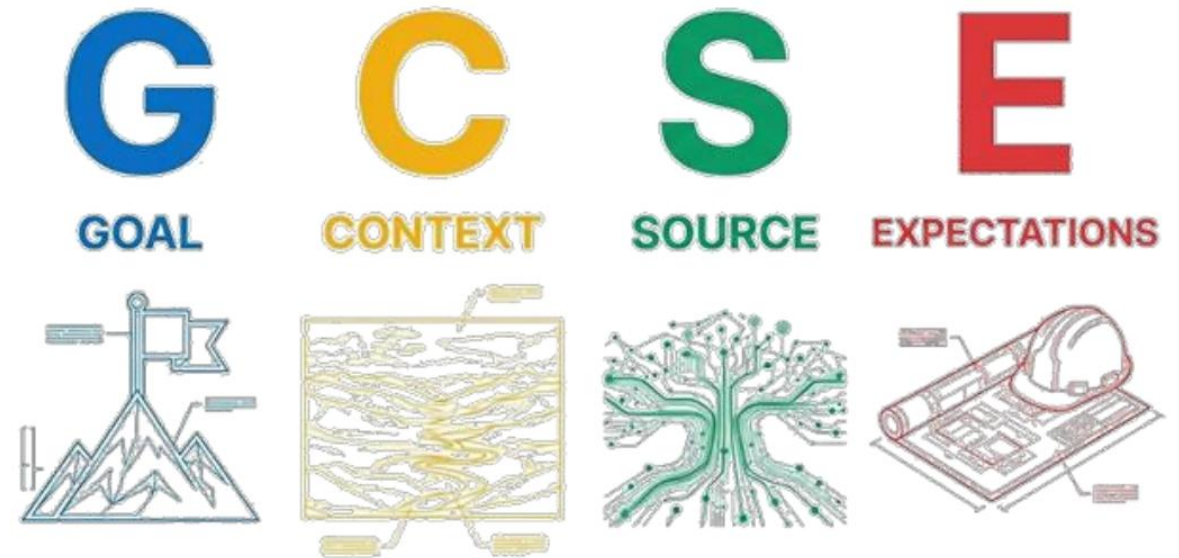
GCSE helps leaders frame complex challenges with:

Goal - What outcome are we trying to achieve?

Context - What situation, constraints, and stakeholders matter?

Sources - What knowledge, data, or perspectives should AI use?

Expectations - What should the output include, avoid, or make clear





Tier 2 - Applied Innovation - team-based problem solving, innovation culture

Goal: Move from literacy to applied, team-based problem solving.

Ideas:

- **Innovation Project Teams:** 3–5 associates + OSU students + faculty coach → rapid cycles on Honda-relevant challenges. (E.g. capstones)
- **Solution Challenge Sprints:** Quarterly themed challenges (e.g., “AI for Safety,” “AI for Sustainability”) where squads compete to prototype solutions. (E.g. Participation with Student Clubs)
- **Cross-Functional Learning Rotations:** Associates from manufacturing join customer experience teams, and vice versa, to ensure broader exposure and fresh thinking. (E.g. 2-4 week sprints)

Honda Benefit: Associates experience application in a “learning” environment -> **EFFICIENCY** gains

OSU Benefit: Students gain real-world, cross-industry experience & job opportunities solving innovation challenges

Center for Software Innovation

The Center for Software Innovation **Part-Time Co-Op Program** connects Ohio State students with startups and innovation-driven companies working on real product, engineering, and go-to-market challenges.

Through paid, part-time roles during the academic semester, students contribute to meaningful projects while gaining hands-on experience alongside founders, engineers, and operators, and companies gain access to motivated talent ready to support real work.

Students typically work 10–20 hours per week while remaining fully enrolled.



Honda-OSU AI Proving Ground Concept

This AI Proving Ground concept has two modes for skills development:

- Action-Based Learning (Tier 1)**
 Honda associates or OSU students independently experiment, prototype, and train their AI skills using shared tools, datasets, and infrastructure
- Guided Team Experimentation (Tier 2)**
 Honda teams work alongside OSU faculty and students to co-develop, test, and refine AI solutions.

AI PROVING GROUND

EXPLORE. • EXPERIMENT. • COLLABORATE. • IMPACT.

Two modes for skills development. One shared foundation.

TIER 1

ACTION-BASED LEARNING

EXPLORE INDEPENDENTLY

Honda associates or The Ohio State University students independently experiment, prototype, and train their AI skills using shared tools, datasets, and infrastructure.

IDEA
↓
EXPERIMENT
↓
ITERATE
↓
IMPROVE

Model Training

TIER 2

GUIDED TEAM EXPERIMENTATION

COLLABORATE DEEPLY

Honda teams work alongside The Ohio State University faculty and students to co-develop, test, and refine AI solutions.

Problem Framing

Model Evaluation

Self-Guided Exploration

Shared Tools & Datasets

Scalable Infrastructure

Build Skills. Create Impact.

Cross-Functional Teams

Faculty & Student Partnership

Co-Develop. Test. Refine.

Real-World AI Solutions

SHARED FOUNDATION

Secure & Governed Environment

High-Quality Datasets

Compute & Tools On Demand

Best Practices & Knowledge Sharing

AI PROVING GROUND

A VIRTUAL ENVIRONMENT FOR EXPERIMENTATION, DEVELOPMENT & LEARNING

Explore ideas. Build solutions. Accelerate impact.

LOW CODE AI/AI DEVELOPMENT TOOLS

Build, train and deploy AI solutions with intuitive, low code tools.

AI VISUAL DEVELOPER ENVIRONMENT

Design workflows visually, integrate components, and accelerate development.

CLOUD COMPUTING OPTIONS

Leverage flexible, scalable cloud resources to build, train and deploy at scale.

ACCESS TO AI MODELS, TOKENS, API'S

Connect to leading AI models and APIs with managed tokens and seamless access.

ACCESS TO PUBLIC DATASETS

Explore and use high-quality public datasets to build better AI solutions.

DATA INFRASTRUCTURE FOR DEVELOPER WORKFLOWS

Reliable data storage, management and lineage built for developer agility.

SECURE SANDBOX ENVIRONMENT

Isolated and secure workspaces to experiment safely and confidently.

AI COACHING / TEACHING

Get expert guidance, learning resources and hands-on support.

AI PROVING GROUND

WELCOME, DEVELOPER

PROJECTS

- EV Battery Predictor
- Warranty Claim Classifier
- Quality Inspection AI
- Supply Chain Forecast

TOOLS

- Visual IDE
- Data Studio
- Model Studio
- API Explorer
- Workflow Builder

RESOURCES

- Documentation
- Notebooks
- Tutorials
- Community

VISUAL AI DEVELOPER ENVIRONMENT

Components: Dataset, Data Prep, Train Model, Evaluate, Deploy

RUN OUTPUT

Model Performance

RMSE: 0.842, MAE: 0.612, F1 Score: 0.93

DATA PREVIEW - EV BATTERY DATA

cycle	temperature	charging_rate	battery_capacity	voltage	cycle_life
1	25.1	0.5C	2.31	3.65	1280
2	24.7	1.0C	2.28	3.64	1253
3	23.9	0.5C	2.35	3.66	1321
4	26.3	1.0C	2.27	3.63	1248

NOTEBOOK

```

1 import pandas as pd
2 from sklearn.ensemble import RandomForestRegressor
3 from sklearn.metrics import mean_squared_error
4
5 df = pd.read_csv('battery_data.csv')
6 x = df.drop('cycle_life', axis=1)
7 y = df['cycle_life']
8
9 model = RandomForestRegressor(n_estimators=200)
10 model.fit(x, y)
11 preds = model.predict(x_test)
12 mse = mean_squared_error(y_test, preds, squared=False)
13 print(f'RMSE: {mse:.3f}')
14
15 RMSE: 0.842
          
```

BUILT ON A SECURE, ENTERPRISE-GRADE FOUNDATION

Secure Access & Identity Management

Data Privacy & Compliance

Scalable Architecture

Monitoring & Observability

Backups & Disaster Recovery



Accessible for exploration.

Powerful when we collaborate.

HONDA



HONDA
The Power of Dreams

Driving the future with AI.





Tier 3 - Deep R&D - leadership in research and strategy

Goal: *Develop a cadre of “AI x Software Champions” who drive Honda’s future strategy.*

Ideas:

- **Research:** 12–24 month embedding at OSU AI labs, where associates co-lead frontier research projects with faculty (e.g., multi-agent mobility systems, responsible AI governance).
- **Honda–OSU Joint Publications:** Fellows co-author papers or whitepapers, strengthening Honda’s credibility in the global AI community.
- **Translational Bridges:** Associates return to Honda with a mandate to “translate” cutting-edge research into internal roadmaps, ensuring practical impact.

Honda Benefit: Associates experience creation in a “learning” environment -> NEW VALUE CREATION gains

OSU Benefit: Researchers & Faculty gain industry collaboration opportunities and access to frontier mobility challenges

Introduction to CRAIG

Center on Responsible AI and Governance (CRAIG), an NSF Industry-University Cooperative Research Center with sites at **Ohio State, Northeastern, Rutgers, and Baylor**. Research, workforce development, and peer-to-peer learning are the three pillars. The center held its first Industry Advisory Board (IAB) meeting on June 4-5. CRAIG's IAB is composed of **Honda, Ford, Meta, Merck, Nationwide, Cardinal Health, and Cisco**. The IAB funded four one-year research projects at \$75,000 each.

- **Runtime governance for agentic AI** (Sachin Kumar, Ohio State). Enforcing instruction hierarchies at runtime and producing auditable records when policies conflict.
- **AgentFuzz** (Zhiqiang Lin, Ohio State). Automated red-teaming of agentic systems, built to run in the pipelines teams already use to build and ship software.
- **Agent-Guard** (Rajiv Ramnath, Ohio State). Purpose-bound data access auditing. Existing controls verify who accessed data; this asks why.
- **Scaling responsible AI with lean tools** (Rakesh Mallipeddi, Ohio State). Applying operational-excellence and quality-management methods to AI governance at scale.



Group Discussion:

- 1. Identify opportunities to build stronger partnerships between academia and industry for applied AI initiatives – Please share known opportunities used for workforce upskilling?***
- 2. Develop strategies for creating a sustainable AI proving ground that drives organizational transformation – Please share your ideas on what features / functionality an AI proving ground must have to be effective and sustainable?***
- 3. Consider governance challenges to scale AI across operations in a responsible way – Please share your opinion on governance challenges to scale AI across operations?***