



FAIRLEIGH  
DICKINSON  
UNIVERSITY

Gildart Haase School of  
Computer Sciences and Engineering

# ENGINEERING AI SOLUTIONS

Progress update



# AI IS DISRUPTING EVERY SECTOR.



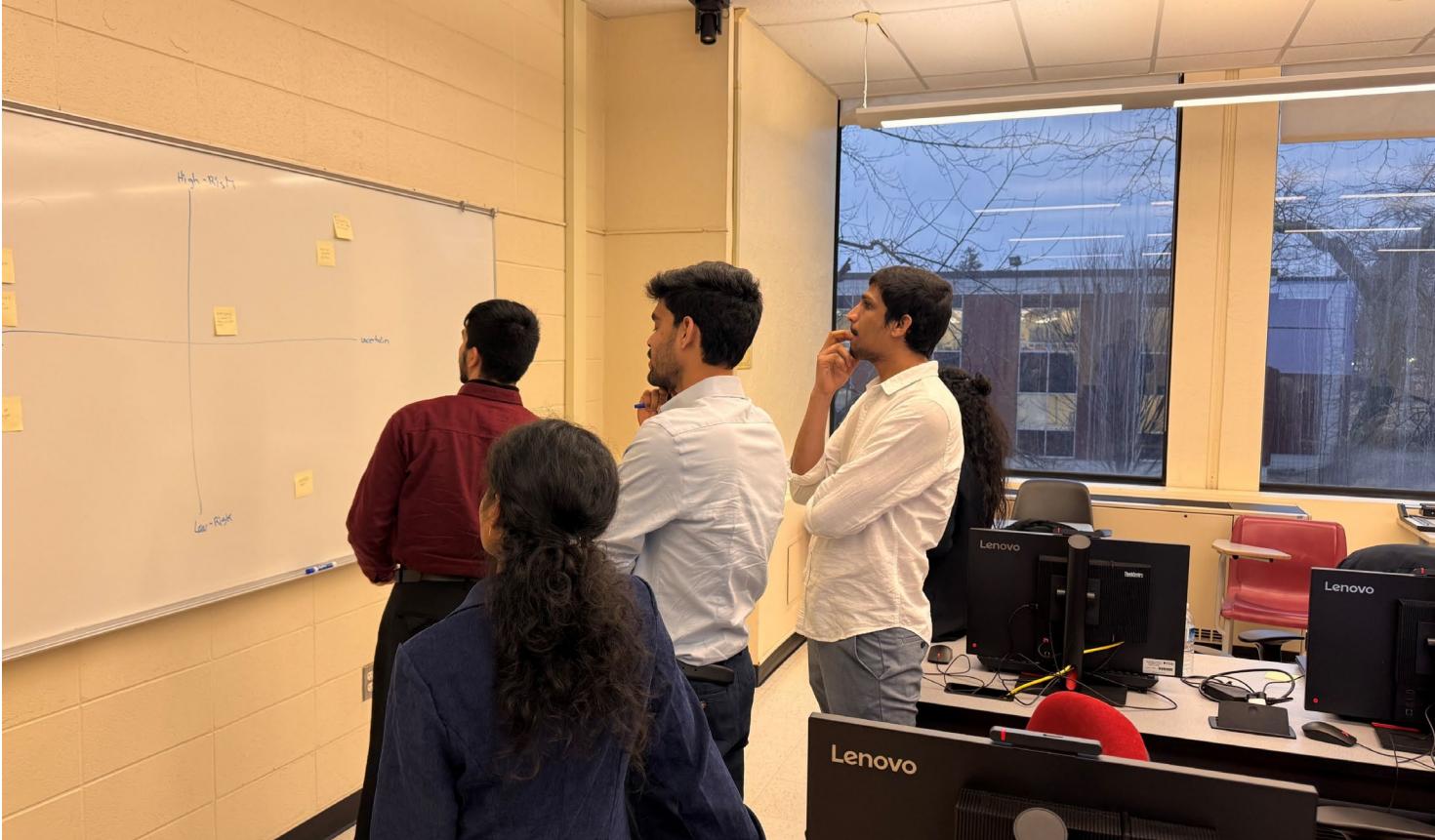


## WHY THIS MATTERS TO FDU

Real-world, portfolio-building  
student experience

Stronger industry integration

Increase enrollment of top  
talent to engineering programs



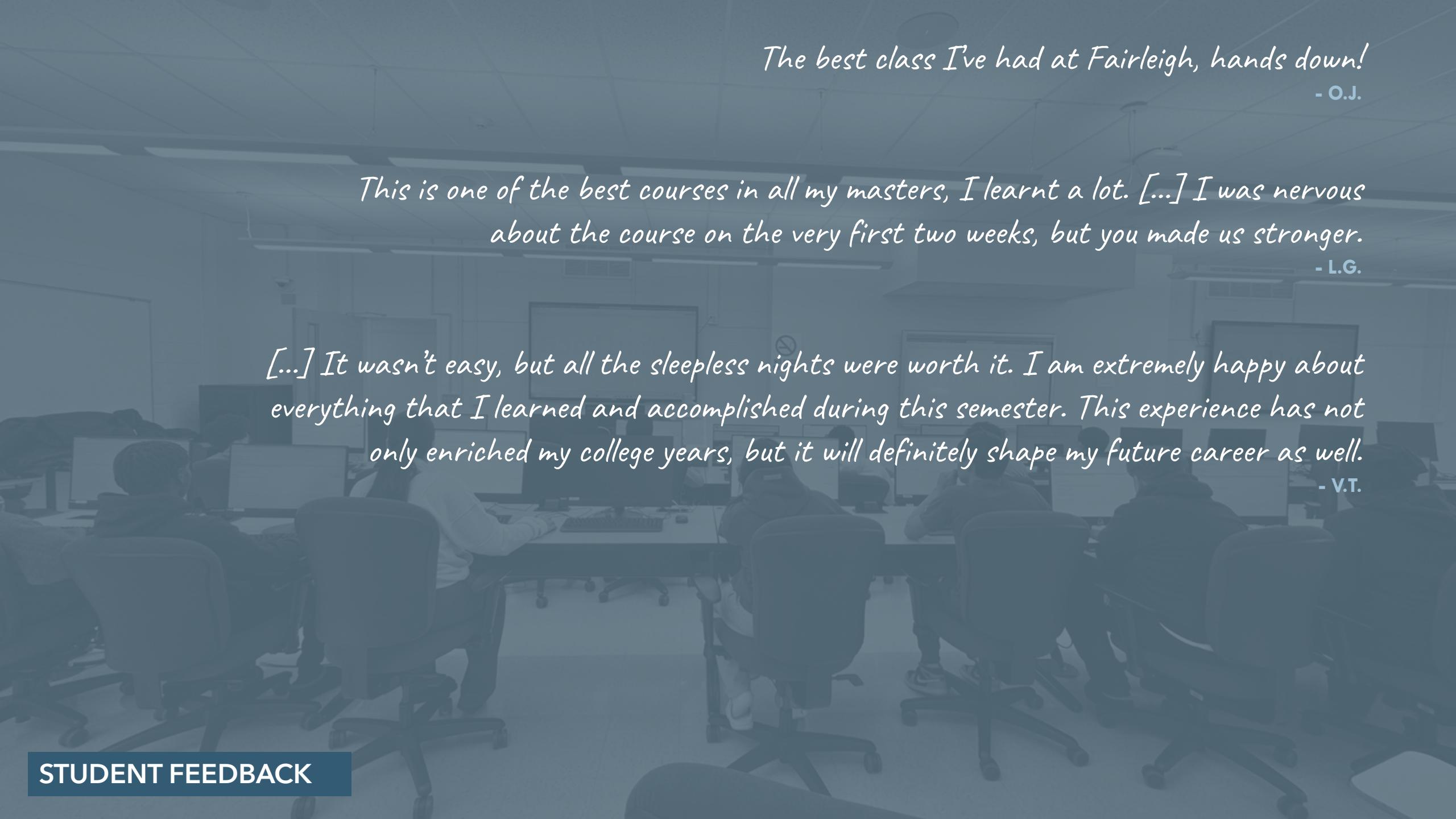
# OUR PROGRAM DESIGN

- Semester-long, team-based projects
- Company-sponsored challenges
- Tech + business integration
- Deliverable: Working prototype



- Selective enrollment
- Promoted through Career Services
- Technical + business curiosity screening
- Treated as a “flagship” experience

# TARGETING TOP TALENT



The best class I've had at Fairleigh, hands down!

- O.J.

This is one of the best courses in all my masters, I learnt a lot. [...] I was nervous about the course on the very first two weeks, but you made us stronger.

- L.G.

[...] It wasn't easy, but all the sleepless nights were worth it. I am extremely happy about everything that I learned and accomplished during this semester. This experience has not only enriched my college years, but it will definitely shape my future career as well.

- V.T.



Our team of engineers were so impressed with [students'] accomplishments. Your dedication and commitment will undoubtedly pay off, and everyone at WaterTech is here to support them in any way possible in their careers.

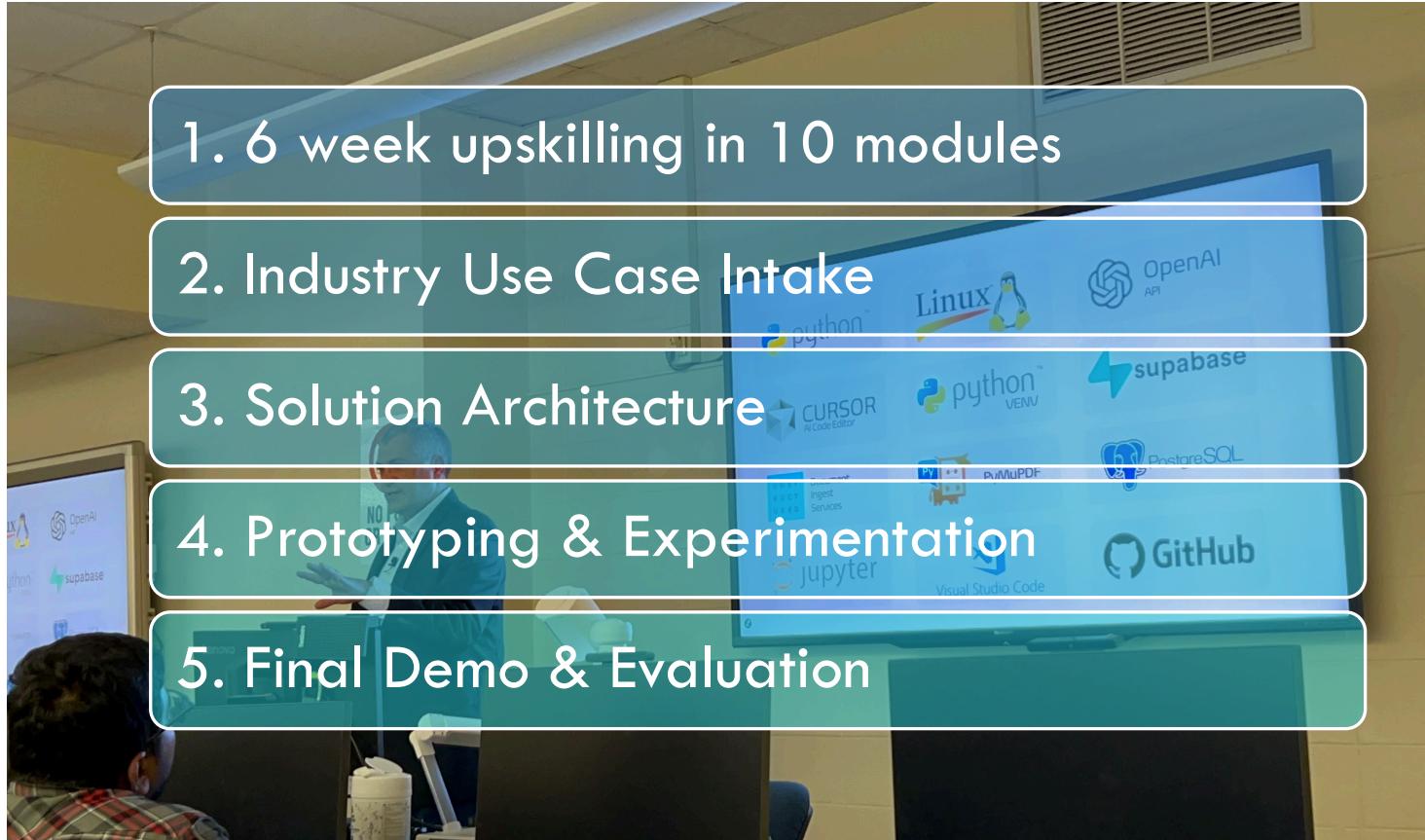
- Tamsir Ba, Supply Chain Operations, Water Tech

This is the holy grail of media research!

- Berj Kazanjian, SVP Strategic Insights & Research, Paramount TV Networks

I want to express my sincere gratitude 🙏 for the opportunity to collaborate with Prof. Dagan and his exceptionally skilled class on our recent generative AI prototype projects 🤖🚀 [...] I was consistently impressed by the brilliance and creativity [...] It was a privilege to witness firsthand the depth of talent and potential within your classroom 🎓

- Shiv Sehgal, EVP Audience Analytics, RSG Media



## 1. 6 week upskilling in 10 modules

## 2. Industry Use Case Intake

## 3. Solution Architecture

## 4. Prototyping & Experimentation

## 5. Final Demo & Evaluation

# HOW IT WORKS

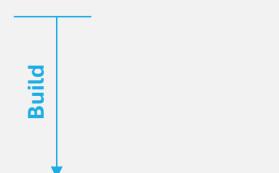
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Su	Mo	Tu	We	Th	Fr	Sa
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<b>14</b>	20	21	22	<b>23</b>	24	25
<b>15</b>	27	28	29	<b>30</b>		





INTERVIEW DAY



## COMPANY IMPACT

### Industry impact:

- Business-centric working prototypes , not slideware
- Fast innovation cycle
- Brainstorming with outside talent in technical & non-technical dimensions (e.g. project management, design thinking, business understanding)



- Risk-free prototyping
- Early access to top students
- Insights from new minds
- PR and thought leadership

# WHAT INDUSTRY GETS



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# DEMO DAY

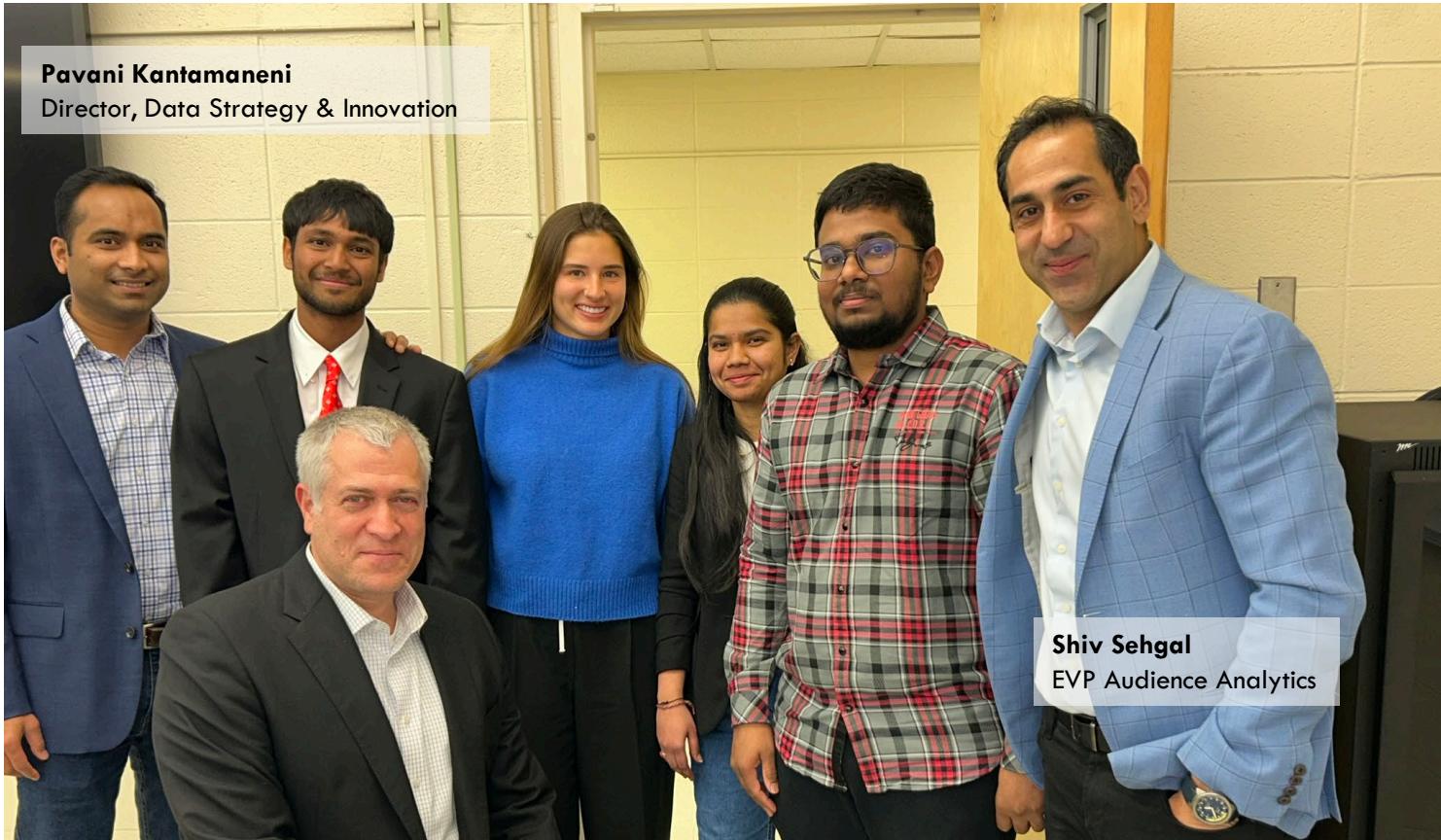
## ADVANCED AI IN BUSINESS



## PROJECT SPOTLIGHT WATERTECH

- Ingested 100+ pool cleaning product manuals
- Extracted parts trees and troubleshooting steps
- Built a chatbot using RAG with vector embeddings
- Impact: Reduce Tier 1 support by up to 60%

**Pavani Kantamaneni**  
Director, Data Strategy & Innovation



PROJECT SPOTLIGHT  
**RSG**

- Ingested legal contracts with license terms
- Used spaCy + embeddings to extract key data
- Mapped to structured fields for ingestion
- Outcome: Hours saved per contract, reduced legal risk



## PROJECT SPOTLIGHT

# RSG/PARAMOUNT RESEARCH

- Ingest PPT slides with nielsen data charts and underlying data directly
- Cross-walk referenced temporal trends with source media assets and properties
- Crawl social media for audience discussions about the assets
- Create insights accompanying each slide exploring the cause & effect of audience sentiment on ratings data

"Viewers demonstrate strong content loyalty, particularly when presented with consistent programming blocks featuring similar themes or creators.",  
"Audience retention patterns suggest viewers form viewing habits around specific time slots rather than following specific shows across different slots.",  
"The success of shows like THE OVAL indicates audiences respond positively to dramatic narratives with continuous storylines that create 'appointment viewing' behavior.",  
"The strong lead-in retention from THE OVAL to SISTAS suggests audiences perceive thematic consistency between the shows, reducing the impulse to channel-surf.",  
"Viewership patterns indicate audiences are developing parasocial relationships with recurring characters, increasing emotional investment and weekly return rates.",  
"The primetime slot performance reflects traditional family viewing structures where decision-making about content is often collective rather than individual.",  
"The performance suggests viewers respond positively to culturally specific content that reflects their lived experiences and community values.",  
"Timing patterns suggest audience availability peaks at the 8 PM hour as household dinner activities conclude, creating a natural viewing transition.",  
"The retention between shows indicates viewers place value on content efficiency - staying on one channel reduces the cognitive load of making new viewing decisions.",  
"Viewership trends suggest audiences are forming 'viewing identities' around specific networks, seeing their content choices as extensions of personal brand."





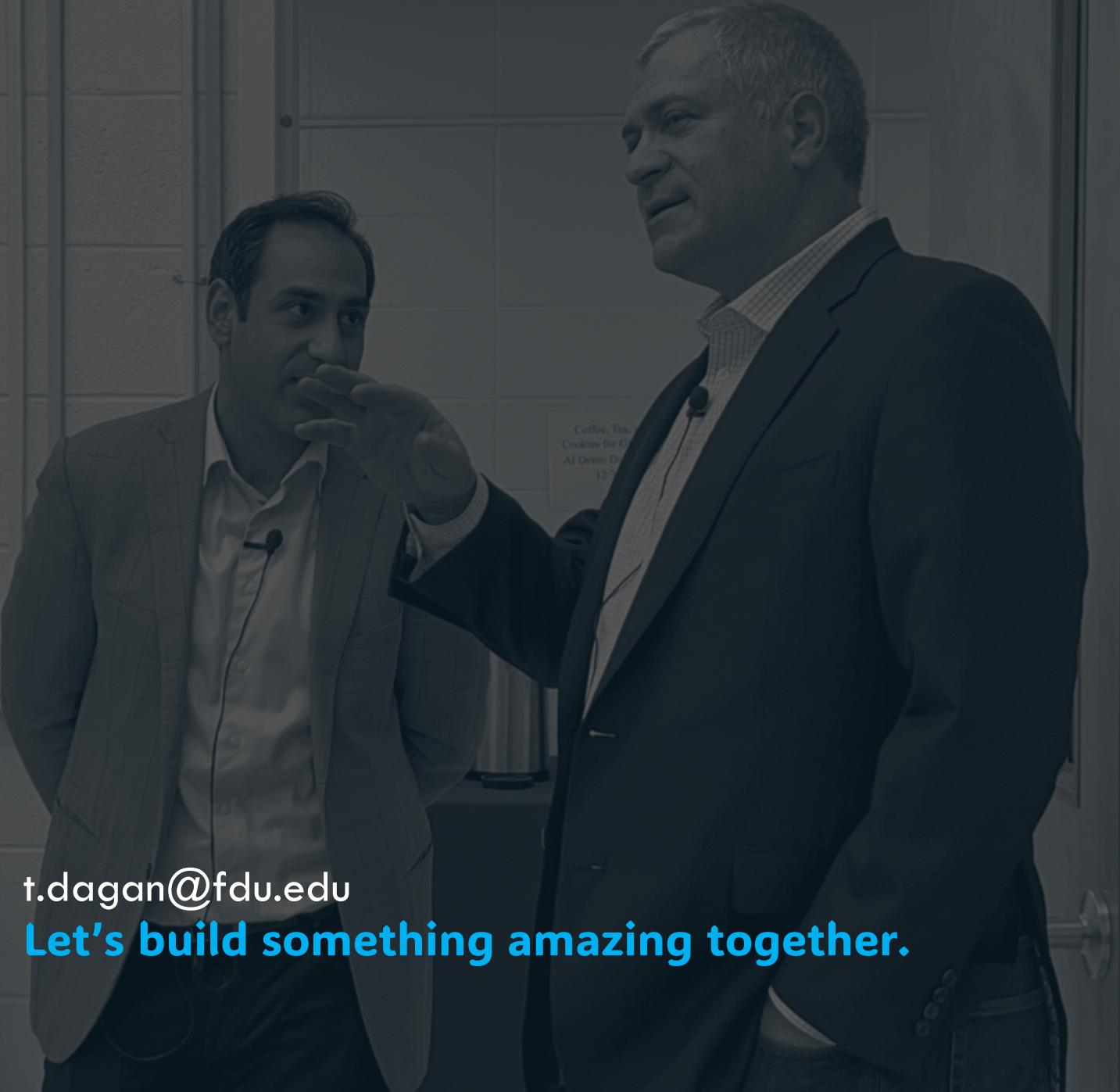
- Recruiting 4–6 partners now
- Low investment, high return

LOOKING AHEAD – JOIN US

# THANK YOU/Q&A

Tiran Dagan is the former CDO/Global Head of Industry Solutions at Cognizant, a global IT services firm with 400,000 employees. Tiran's Industry Solution Group (ISG) consisting of 400 commercial, solution and engineering experts, drove the creation of repeatable, business solutions that generated over \$200 million in new revenue for the firm.

Prior to Cognizant Tiran held various leadership roles at GE/NBC Universal, Ernst & Young and IBM and has been a key note speaker at various industry conferences and expert panels.



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**Let's build something amazing together.**