Case Study

Government, Non-profit, Education
AI, Hardware

Bridging the Digital Divide with AI PCs

NWN, Intel, and an NFL player's foundation collaborate to empower Baltimore youth with leading-edge AI technology—and city administrators with a flexible platform for AI deployment.

At a glance

- **AI PCs:** Equipped with Intel® Core™ Ultra processors and on-device AI capabilities to enable secure, real-time AI processing without reliance on cloud infrastructure.
- **AI PC as a Service (AI PCaaS) model:** Subscription-based managed service from NWN that allows public sector customers to deploy AI technology without large upfront costs or maintenance burdens.
- **Custom AI learning curriculum based on Intel® Digital Readiness Program:** AI-driven computer vision games, generative AI storytelling, and prompt engineering workshops that demystify artificial intelligence and inspire curiosity.

Executive Summary

The Greenmount AI Computing Resource Lab, a collaboration between NWN, Intel, Baltimore City Recreation and Parks, and the Sean Ryan Communities of Care Initiative, is transforming digital inclusion and technology access for youth with limited access to computers. The project deployed Intel-based AI PCs to a community lab and designed hands-on learning experiences to equip children with the latest technology and essential AI and STEM skills.

Through its unique AI PC as a Service (AI PCaaS) model, NWN provided Baltimore, Maryland city leaders with a flexible pathway for AI technology adoption that offers predictable costs, seamless upgrades, and minimal IT overhead. The initiative's launch event showcased the impact of community-driven AI education—inspiring local youth to explore AI concepts and officials to consider expanding the model to serve other use cases.

Challenge: Closing the digital divide in the age of AI

Access to AI-powered tools and an understanding of how artificial intelligence is changing the world are crucial for today's youth to thrive in the economy of the future. For those without reliable access to basic computing and broadband, however, the rise of artificial intelligence threatens to expand the digital divide even wider.

People living in urban neighborhood areas like Greenmount East in Baltimore, Maryland are familiar with the challenges posed by a lack of access to technology. More than 27% of households in Greenmount East lack internet access, and 22% of adults in this neighborhood did not attain a high school diploma or equivalent.[1] With AI proficiency becoming increasingly important for future career prospects, lack of access to digital tools and connectivity can affect the ability of children growing up in areas like Greenmount East to achieve their educational and economic goals.

Professional football player Sean Ryan of the Baltimore Ravens grew up in an area of Brooklyn, NY where computer and internet access were similarly limited. Now, through the Sean Ryan Communities of Care Initiatives, he is empowering youth from economically disadvantaged backgrounds with consistent access to leading-edge technology.

Michael Greenbaum is Sean Ryan's adoptive father and a business analyst with NWN, a leading AI-powered solutions and managed technology provider. He explained how a collaboration between Ryan, the City of Baltimore, NWN, and Intel came about to equip young people in Greenmount East with the latest AI technology.

"Early on, we saw that you have a lot of these smart kids who don't have the tools and the resources available with technology to take advantage of their imagination and potential," said Greenbaum. "We [NWN] have a relationship with the city of Baltimore, and Sean is connected to the city of Baltimore as a Ravens player, so we looked for things that we could do to give back."

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> — Micheal Greenbaum, NWN business analyst and Sean Ryan's adoptive father

The experienced team of collaborators understood they needed to overcome several common factors that often impact the effectiveness and results of community technology efforts.

- **Inadequate IT resources:** Without staff and budget to keep ahead of maintenance, hardware will break down from heavy daily use.
- **Outdated technology:** Community-based computer labs are rarely equipped with the latest technologies that enable youth to explore concepts and learn skills that can help them succeed at the leading edge of technology.
- **Data privacy requirements:** Youth-focused, tech-access programs are understandably hesitant to adopt AI solutions that rely on public LLMs and cloud services due to concerns about data privacy.

Solution: AI PC computing resource lab

The Sean Ryan Communities of Care Initiative partnered with the City of Baltimore, NWN, and Intel to connect children in Greenmount East with the digital tools and skills to thrive in the age of AI. They also designed the solution to ensure that Baltimore City Recreation and Parks has the support, flexibility, and scalability to maintain and expand it over the long term.

Rather than deploying standard legacy PCs or tablets, the project was designed to be an AI computing resource lab powered by the latest commercial-grade, Intel-based AI PCs.

Next-generation AI PCs
AI PCs are a new class of personal computers that are engineered and optimized for advanced artificial intelligence workloads. Powered by Intel® Core™ Ultra processors, AI PCs distribute and optimize workloads across three compute engines to deliver outstanding, local AI performance.

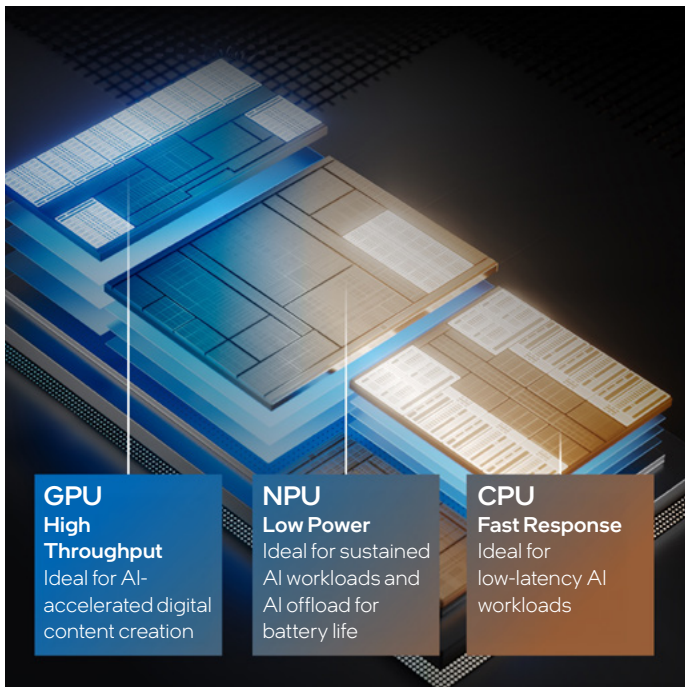
GPU
High throughput: Ideal for AI-accelerated digital content creation

CPU
Fast response: Ideal for low-latency AI workloads

NPU (neural processing unit)
Low power: Ideal for sustained AI workloads and long battery life

The commercial-grade AI PCs from HP equip the lab with advanced AI performance and capabilities along with the reliability to stand up to all-day use.

Sustainable digital inclusion with AI PCaaS
NWN, a leading artificial intelligence-powered technology solutions provider, has been a partner of the City of Baltimore for 17 years. Using the company's AI PC-as-a-service (AI PCaas) model for this project gives the city a sustainable approach to deploying, maintaining, and scaling AI-powered computing resources in the AI Computing Resource Lab and beyond. AI PCaas offers:



- **Predictable costs:** Instead of large capital investments, municipalities can budget for AI PCaaS as a scalable operational expense (OpEx).
- **Continuous upgrades:** The subscription service model ensures PC labs are equipped with the latest AI-enabled hardware and software updates, preventing technology obsolescence.
- **Reduced IT overhead:** With managed services and remote monitoring, municipalities can minimize IT maintenance costs and resource allocation.
- **Scalability:** Cities and non-profits can expand AI initiatives across multiple community centers, libraries, and schools without the complexities of traditional infrastructure investments.

NWN CMO Andrew Gillman said the company aims to deploy the largest fleet of AI PCs in North America with the AI PCaaS model. Successful initiatives like the Greenmount AI Resource Lab will serve as proof-of-concept deployments for Baltimore and other municipalities, allowing them to test and validate the benefits of AI PCs for use in other government services.

Results: Greenmount AI Computing Resource Center

On June 24, 2024, Baltimore City Recreation and Parks hosted an "AI Athletics Day" at the Greenmount Recreation Center to celebrate the opening of the AI Resource Lab. While the event was attended by Sean Ryan and other Ravens players, as well as local officials and representatives from NWN and Intel, the focus of the day was to expose East Baltimore youth to emerging technology through a variety of interactive athletic-oriented activities.

Alongside Sean Ryan and other NFL players, 60-70 local children participated in educational workshops where they used AI PCs to explore computer vision, creative storytelling, prompt engineering, and other AI and STEM-focused activities.

"The interaction with the children was good for me because when I look into some of their eyes, I see myself," reflected Sean Ryan. "Me being able to be that big brother for them and answering some of those questions, and them seeing me in person—not just with a helmet on TV—that meant more to me."

Andrew Gillman from NWN was thrilled by how excited and focused the eight- to 15-year-old kids were about AI activities. "What I love about what we did together as a partnership is that we set the groundwork for answering 'What is AI?' 'How does it work?' and 'How can we get our kids learning and inspired by AI?'" he said.

Baltimore City Recreation and Parks CIO Jarell Johnson echoed Gillman's sentiment about the impact the AI Resource Lab will have on fostering digital inclusion and opening opportunities for area youth.

"The power that they'll have in their hands with these new AI PCs, and the training and the courses that we'll provide, it's limitless," Johnson said.

"I see these kids being the future of technology that's going to change the world," Greenbaum added.

Foundation for future opportunities

Anshul Sonak, global director of digital readiness programs & strategy at Intel noted that people from several departments in Baltimore city government stopped by the Greenmount Recreation Center to see AI PCs in action for themselves. He thinks the enthusiasm and immediate acceptance the youth had for AI technologies helped administrators and decision makers become more comfortable with the concept of artificial intelligence and glimpse its revolutionary potential.

"Everybody saw that. Students, kids, officials were deeply engaged. They were creating stories using generative AI and playing games using computer vision," said Sonak. "It helped create confidence that AI PCs are very safe in a local edge environment."

The success of an initiative like the Greenmount AI Resource Lab serves as a strong proof-of-concept for municipalities, allowing them to understand and validate the benefits that AI PCs can bring to other government services.

Moreover, it highlights the strengths of the AI PCaaS model as an approach that enables governments, non-profits, and enterprises to flexibly deploy and scale local AI capabilities without large capex budgets or maintenance burdens.

"I don't think it's going to stop here," Ryan said. "I think this is just the blueprint to what we want to do next." In fact, NWN and Intel have already been involved with developing a similar AI PC lab initiative in Boston, MA and are seeking additional sports and technology collaborations in cities nationwide.

Learn more:

- Find out more about NWN
- Discover AI PCs
- Explore the capabilities of Intel® Core™ Ultra processors
- Learn about Intel® Artificial Intelligence solutions

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> — Sean Ryan, NFL player and Founder of Sean Ryan Communities of Care

intel ai

[1] https://nwn.ai/news-room/press-release/nwn-carousel-announces-ai-athletics-baltimore/

0325/SB/CAT/PDF 364834-001US