

The Future of Business in Pittsburgh

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Space Innovation Center Opens in Pittsburgh

Space industry leaders gathered in Pittsburgh in December to announce the creation of a permanent Space Innovation Center, known as the Keystone Space Innovation Center, on Pittsburgh's North Shore.

"This innovation hub, our partnership the Keystone Space Collaborative and the heightening activities happening here in the Pittsburgh and surrounding region are vital and important to both the United States Air Force and the United States Space Force," said General David D. Thompson, Vice Chief of Space Operations for the U.S. Space Force. "I'm incredibly proud to see what this town, this region and all of you have done to create this as a world center for technology, innovation and development, especially when it comes to space."



Officials participate in the ribbon-cutting ceremony for the new Keystone Space Innovation Center in Pittsburgh.

The Keystone Tri-State (OH, PA, WV) region has a long legacy as a home for important space missions, tech development and manufacturing, and space innovation. With over 500 regional space ecosystem participants receiving over \$2.4 billion in space-relevant federal funding in the last three years, and with many of those space and space-adjacent companies and research institutions being located in and around Pittsburgh, the Tri-State Region is poised to become one of the top locations for innovation and investment in the space industry.

"The Tri-State region has what it takes to be at the forefront of a new space economy," said Justine Kasznica, Keystone Space Collaborative founding member and Board Chair. "Our region is known for innovation in energy, life sciences, advanced technologies such as AI, robotics, and computer science, as well as advanced manufacturing. These are the industries that will unlock the economic potential of Lower Earth Orbit and beyond. Working together, Pennsylvania, Ohio and West Virginia are well positioned to emerge as a recognized catalyst of the growing global space economy. This is why the Keystone Space Collaborative was formed and this is why we are thrilled to announce the partnership with AFWERX and Astrobotic to bring a physical space innovation hub to the region."

AFWERX, an innovation and investment arm of the US Air & Space Force, has funded over \$70 million to 230 companies in the Tri-State/Pittsburgh region since 2017, making Pittsburgh a natural fit for the newest of their national AFWERX locations.

CorePower Magnetics Receives Funding to Bring Magnetic Solutions to Market



The CorePower Magnetics Leadership Team.

Building upon soft magnetics technologies invented at Carnegie Mellon University and the National Energy Technology Laboratory, Pittsburgh-based CorePower Magnetics is working to bring high performance power electronics components to market. The startup, which seeks to deliver state-of-the-art compact and efficient magnetic solutions targeting electric vehicles (EVs) and the grid, has announced \$2.5 million in pre-seed funding from Volta Energy Technologies, Evergreen

Climate Innovations, and Innovation Works, as well as \$5 million in funding from the U.S. Department of Energy's Advanced Research Projects Agency-Energy (ARPA-E) Seeding Critical Advances for Leading Energy Technologies (SCALEUP) program.

According to a release, CorePower is commercializing magnetic components, like inductors, transformers, and electric motors with a combination of component design, advanced processing, and specialized alloys inside of its cores. Their funding enables CorePower to establish its manufacturing roots in Pittsburgh to carry on the tradition of innovation and manufacturing in metals and energy that has long defined the region.

"The potential of EVs and renewables has created unprecedented needs for more efficient and power-dense magnetics so that EVs can travel farther and charge faster, and the grid can adequately handle growth in demand," said CorePower Magnetics' CEO Dr. Sam Kernion.

Commercialization partners Eaton and John Deere are also supporting CorePower Magnetics. "CorePower Magnetics' solutions have the potential to be useful across a broad range of Eaton applications," said Shailesh Notani, Eaton's Lead System Engineer for EV Fast Charging. "Eaton is looking forward to collaborating with CorePower to standardize new magnetic components for use in EV chargers and help drive vehicle electrification."

CorePower aims to become the premier leader in soft magnetic solutions, with the recent funding enabling installation of a pilot manufacturing facility and critical hires for the technical, manufacturing, and commercial roles within the business.

Pittsburgh Business News and Updates

- Dick's Sporting Goods Launches \$50M Investment Fund
(<https://chainstoreage.com/dicks-sporting-goods-launches-50-million-venture-capital-fund>)
- CMU & Simcoach Games Train Next Generation of Change Innovators
(<https://www.cs.cmu.edu/news/2022/simcoach-collaboration>)
- RoadRunner Recycling receives \$20M in funding from Fifth Wall
(<https://www.wastetodaymagazine.com/article/funding-roadrunner-recycling-fifth-wall-commercial-recycling/>)
- Lumis uses augmented reality to train nurses (<https://nextpittsburgh.com/latest-news/inside-pittsburgh-tech-lumis-uses-augmented-reality-to-train-nurses/>)
- Pittsburgh native, Yakult Swallows pitcher, returns to Major League Baseball
(<https://triblive.com/sports/after-successful-run-in-japan-plum-native-scott-mcgough-making-return-to-mlb/>)



About Ryan

Ryan O'Shea is a JETRO Investment Advisor focused on connecting Japanese companies to opportunities in Pittsburgh, Pennsylvania. He is the host of Future Grind, a podcast that explores the ethics and impact of emerging science and technology, and also works with the Pittsburgh Robotics Network. In 2017, Ryan co-founded an artificial intelligence startup that was named a Top 10 team in the IBM Watson AI XPRIZE. Ryan has represented NASA and CalTech's Jet Propulsion Laboratory as a Solar System Ambassador and serves both as a World Economic Forum Global Shaper and an ambassador for Pittsburgh AI. He is a graduate of the University of Pittsburgh & serves on the boards of multiple non-profit organizations.