

VIPC Awards CCF Grant to VCU for Machine Intelligence Platform to Automate Pharmaceutical Data Analysis

CCF funding supports Dr. Thomas Roper with chemical analysis modeling solution, automating a task historically dependent on human experts.

RICHMOND, VIRGINIA, UNITED STATES, March 12, 2024 /EINPresswire.com/ -- The Virginia Innovation Partnership Corporation (VIPC) today announced that Virginia Commonwealth University

(VCU) has been awarded a Commonwealth Commercialization Fund (CCF) grant for \$75,000 in support of research conducted by Dr. Thomas Roper and graduate student Matthew Glace.

VIPC's CCF programs have distributed more than \$54 million to Virginia-based startups,

entrepreneurs, and university-based inventors since 2012 in support of critical early technology testing and market validation efforts.

“

Our solution takes a time-consuming, manual process and turns it into one that is superior in accuracy and length of time. A process that once took days is now accomplished in minutes.”

*Dr. Thomas Roper, Ph.D., VCU,
Director of Pharmaceutical
Engineering*

A wide variety of commercial manufacturing applications, including from the pharmaceutical, oil, and food industries, rely on spectroscopic data to rapidly assess product quality. Spectroscopy, or the study of objects and materials based on their color, can be used in quality control settings to understand a product's temperature, composition, and purity. Converting spectroscopic data to models that can be used to monitor and control pharmaceutical processes, in particular, requires extensive time and personnel effort.

To reduce this burden, Glace and Roper developed a platform that can accommodate the creation of chemometric models from raw spectroscopic data, including infrared, near-infrared, Raman, and more. The patent-pending solution is automated, faster, and requires no expert ability. CCF funding is enabling VCU to further refine, validate, and market the platform, which appears in early testing to be capable of meeting or outperforming expert human model analysis in terms of accuracy, robustness, and speed.



“Often human interpretation and unintentional bias are limiting factors for utilizing the full potential of information-rich yet highly complex spectroscopic data. Our solution takes a time-consuming, manual process and turns it into one that is equal or superior in accuracy and far superior in length of time. A process that once took days is now accomplished in minutes and allows for real-time action as opposed to reaction,” said Roper, Ph.D., VCU Professor of Chemical Engineering and Director of Pharmaceutical Engineering and VIPC Eminent Researcher.



“There is significant potential for this machine learning platform to support countless industries, and Matthew Glace and Dr. Roper continue to learn about future applications that may benefit from its capabilities,” said Hina Mehta, VIPC’s Director for University Programs. “Large commercial companies have already expressed interest in the platform, and the CCF grant is enabling necessary improvements to the algorithm and its ability to analyze more complex, diverse datasets, making the technology more attractive to future licensing and commercialization opportunities.”

Virginia Commonwealth University is a public research university based in Richmond, Va.

About Virginia Innovation Partnership Corporation (VIPC)

Connecting innovators with opportunities. As the nonprofit operations arm of the Virginia Innovation Partnership Authority (VIPA), VIPC is the commercialization and seed stage economic development driver in the Commonwealth that leads funding, infrastructure, and policy initiatives to support Virginia's innovators, entrepreneurs, startups, and market development strategies. VIPC also collaborates with local, regional, state, and federal partners to support the expansion and diversification of Virginia’s economy.

Programs include: Virginia Venture Partners (VVP) | VVP Fund of Funds | Commonwealth Commercialization Fund (CCF) | Petersburg Founders Fund (PFF) | Smart Communities | The Virginia Smart Community Testbed | The Virginia Unmanned Systems Center | Virginia Advanced Air Mobility Alliance (VAAMA) | The Public Safety Innovation Center (PSIC) | Entrepreneurial Ecosystems | Regional Innovation Fund (RIF) | Federal Funding Assistance Program (FFAP) for SBIR & STTR | University Partnerships | Startup Company Mentoring & Engagement.

For more information, please visit www.VirginiaIPC.org. Follow VIPC on Facebook, X (formerly Twitter), and LinkedIn.

About the Commonwealth Commercialization Fund (CCF)

VIPC's Commonwealth Commercialization Fund (CCF) accepts applications and awards funding on a rolling basis to Virginia's small businesses and university-based innovators. For Virginia's academic and nonprofit research community, the competitive grant program seeks to fund high-potential Virginia-based academic research teams that are developing technologies with strong commercial potential. The grants support early technology and market validation efforts such as customer discovery, market research, business model validation, the development of prototypes or minimum viable products (MVPs), customer pilots, and intellectual property protection, team development, and more. For more information on funding opportunities and eligibility requirements, or to apply, visit the CCF pages from www.VirginialPC.org.

Angela Costello, Vice President of Communications
Virginia Innovation Partnership Corporation (VIPC)
angela.costello@VirginialPC.org

Visit us on social media:

[Facebook](#)

[Twitter](#)

[LinkedIn](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/693625157>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2024 Newsmatics Inc. All Right Reserved.