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Note: Images available at: Immediate Release

New project puts Tandon students in

driver's seat at Daimler Truck

Students will work collaboratively with engineers to supercharge a critical tool in the design and build process for truck powertrains.

BROOKLYN, New York, Weekday, Month xx, 2021 – A new agreement between the <u>NYU Tandon School</u> of <u>Engineering</u> and <u>Daimler Truck North America</u> (DTNA) gives students hands on experience helping the company streamline the design and production process for the drive systems of commercial trucks.

As part of the <u>Vertically Integrated Projects</u> (VIP) course at NYU Tandon, students will work with a machine learning-based tool that gathers truck specifications for automated performance calculations to optimize truck drivetrains.

James Vue, design engineer at DTNA, who will co-mentor students in the project, explained that the VIP team will be instrumental in updating the automaker's antiquated, labor-intensive spreadsheetbased tool used to organize the supply chain for specific truck drivetrain designs. They will help streamline and integrate it with a robust database allowing programmatic updates to the tool, obviating the manual work of altering data fields and formulas whenever a specification changes, a design is altered or a new part is added to the supply chain.

"Currently, the tool we use proves challenging, partly because of its rigidity, its lack of automation and the fact that it isn't very user friendly," he said. "There's just a lot going on that can confuse first-time users, especially those without the right kinds of coding experience."

Students will be tasked with helping to design a simpler version of the system that is more user friendly, more visually appealing and intuitive, and housed on a more robust platform, such as Python.

<u>Jack Bringardner</u>, Assistant Dean for Academic and Curricular Affairs and Industry Associate Professor and Director in the general engineering, who oversees the VIP programs at NYU Tandon said the multiyear alliance, involving two to four years of academic participation by student team members will be a just the kind of opportunity students seek because it offers a chance to work in a professional setting.

"Vertically Integrated Projects at NYU Tandon School of Engineering is excited to start this collaboration for innovation," he said. "This multidisciplinary student team will gain practical experience from this industry-based project. Students will be able to apply the skills they are learning to modernize technology currently being used by professional engineers."

Advising the team at NYU Tandon is <u>Fred Strauss</u>, industry professor of computer science and engineering.

Shayan Khan, a design engineer at DTNA, who was himself a VIP participant while an undergraduate at NYU Tandon, initiated the project, which he explained is a great benefit for students seeking to add rich experience to the rigors of academic life.

"We saw VIP as a great mechanism for giving students an invaluable immersion in real-world experience by exposing them to how work is really done in our industry, and giving them a chance to engage with experts in the field and acquire skills even before they graduate," he said. "And I'm proud that it builds a bridge between my employer and alma mater, creating a collaborative environment to develop real systems for real-world use."

Shayan added that the rare opportunity the project offers students to learn how to work in a teambased industrial environment, how to communicate in a professional manner and to develop leadership skills, as well as the addition of the experience to their portfolios will give them a leg up in the job market.

"We know the future is focused on work based experiences. Being around industry, working with a major company — not merely on a research project but one with real consequences, a timeline, people you have to report to, meetings with technologists and project chiefs — looks very impressive and is critical when faced with the one question you will be asked in an interview: 'do you have industry experience?' This gives students that edge."

About the New York University Tandon School of Engineering

The NYU Tandon School of Engineering dates to 1854, the founding date for both the New York University School of Civil Engineering and Architecture and the Brooklyn Collegiate and Polytechnic Institute. A January 2014 merger created a comprehensive school of education and research in engineering and applied sciences as part of a global university, with close connections to engineering programs at NYU Abu Dhabi and NYU Shanghai. NYU Tandon is rooted in a vibrant tradition of entrepreneurship, intellectual curiosity, and innovative solutions to humanity's most pressing global challenges. Research at Tandon focuses on vital intersections between communications/IT, cybersecurity, and data science/AI/robotics systems and tools and critical areas of society that they influence, including emerging media, health, sustainability, and urban living. We believe diversity is integral to excellence, and are creating a vibrant, inclusive, and equitable environment for all of our students, faculty and staff. For more information, visit <u>engineering.nyu.edu</u>.



