Tirthak Patel is an Assistant Professor in the Department of Computer Science at Rice University and the Director of the Positive Technology Lab, conducting system-level research at the intersection of quantum computing and high-performance computing (HPC). His research explores the trade-offs among factors affecting reliability, performance, and energy efficiency, in recognition of which he has received the ACM-IEEE CS George Michael Memorial HPC Fellowship and the NSERC Alexander Graham Bell Canada Graduate Scholarship.

Patel is a member of the Ken Kennedy Institute, an interdisciplinary group at Rice University committed to addressing critical global challenges through foundational research in AI and Computing. He is also a member of the Smalley-Curl Institute at Rice University that supports ground-breaking research and education in the areas of Nanoscale Science and Technology, Quantum Materials, and Quantum Information Science.

Patel's work has also been nominated for the best paper award at several highly selective conferences, including Supercomputing (SC) and ICCAD. The tools, datasets, and methodologies from his work are largely open-sourced, as an important facet of his work is making scientific research accessible. Prior to joining Rice University, he received his Ph.D. in Computer Engineering from Northeastern University.