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Devising Strategies for Online and Remote Teaching of Computational Fluid Dynamics Concepts. DEBANJAN MUKHERJEE, University of Colorado, Boulder — The ongoing Covid-19 pandemic has presented unprecedented challenges for educators worldwide, with a heavy reliance on online and remote teaching modalities. Considering the lessons learnt during this pandemic, it is likely that remote teaching remains a prominent offering across institutions post-pandemic. However, delivering all forms of content effectively in remote teaching continues to pose difficulties, especially when considering active and hands-on modules and in-person interactions. This points to a need for integrating specific strategies and practices into course design and execution for remote learning. Here, we present our experience with devising strategies for online and remote teaching for an ongoing computational fluid dynamics class at the University of Colorado Boulder. With the transition to remote learning forced by pandemic lockdown measures, we designed and employed a number of technology-driven approaches to deliver content through online and remote modalities. These focused on providing an alternative avenue for hands-on exploration of key CFD concepts and techniques, as well as enabling peer-to-peer engagement despite the lack of in-person interactions. We will share our approach, our experiences, and our plans for future offerings of the class.

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