

# Jordan Raymond



Jordan Raymond is a Hydrogen Research and Test Engineer at Stoke Space, a rocket company out of Kent, WA, building fully reusable mid-size rockets. At Stoke, Jordan is responsible for insulating the cryogenic tanks in the rocket and is part of a small team executing on a Department of Energy project to capture hydrogen boil-off with sorbents. Prior to working at Stoke, Jordan was a Senior Hydrogen Thermal and Fluids Engineer at First Mode in Seattle, WA. While there she was a part of a team developing liquid hydrogen vehicle fuel systems for ultra-class mining vehicles. She was a product owner of the fluids system and responsible for successful deployment of the system as well as successful interfacing with all neighboring systems, and has multiple patents pending related to this work.

Jordan obtained both an MS and a BS from Washington State University in Mechanical Engineering, while working in Dr. Jacob Leachman's Hydrogen Properties for Energy Research Lab. As a graduate student Jordan helped design, build, and commission a small-scale portable hydrogen liquefier for drone refueling as part of a Department of Defense contract. Her thesis focused on the design of a novel heat exchanger mounted to a cryogenic refrigerator used for liquefaction within the system. The heat exchanger utilized branching and varying wall thicknesses to minimize entropy generation within the system, thereby increasing efficiency. Prior to this, Jordan led a project seeking to mimic oxygen distillation columns which leveraged a vortex tube with an applied magnetic field that was used to direct paramagnetic liquid oxygen, more than doubling the oxygen in the outlet gas stream. This work helped her win the Donna Jung Award in 2019, and there is a patent pending.