## Razim Refai

## **Aftermath of a Forest Fire**

## Master of Science

Department of Mechanical Engineering, Faculty of Engineering

Image created in Fort Providence, Northwest Territories Semi-Finalist

Taken at Fort Providence, Northwest Territories, this image captures the interaction between the smoke from an extinguished forest fire and light from the sun.

The research being carried out involved developing a sensor to estimate the energy released from forest fires that occur every summer in Canada. Using a mathematical heat conduction model, a sensor was created to help evaluate this energy. Several tests were conducted in full-fledged forest fire scenarios. The fires were subsequently put out with the help of fire marshals. The aftermath of the testing and fires leave the forests in a cloud of translucent smoke that rises up to interact with the light in a peculiar yet beautiful fashion.