

# CWSF 2019 - Fredericton, New Brunswick



## Tessa Hason, Annika Waschke

### Aortic Dissection Detection

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Montreal

**City:** Westmount, QC

**School:** The Study

**Abstract:** An aortic dissection is a tear in one of the three main layers of the aorta, the largest artery in the body. The goal of our project was to use a CNN (Convolutional Neural Network) to detect aortic dissections on a CT scan, given that the quicker the diagnosis, the higher the chance of the patient's survival.

### Biographies

Tessa - For further investigations my partner and I would like to attempt to investigate conditions other than aortic dissections, for example aortic aneurysms. We believe that the thinking we used in this project can be applied to other situations.

Annika - My name is Annika Waschke and I am in Grade 10 at The Study School in Westmount, Quebec. I enjoy playing tennis, writing and music. I also love to volunteer in my community, and tutor younger students at my school. I plan to go into medicine when I'm older. My partner Tessa and I garnered inspiration for our project after we noticed how much of a role technology plays in the development of medicine, and we plan to continue our project further by removing the need for human interpretation by teaching our CNN how to interpret the graphs it produces. I would suggest to students interested in doing a science project to plan your project out careful...