AUTOMELTER

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WHY IS AUTOMELTER IMPORTANT? (1)

3 options to clear snow: shovel, electric snow plow, heated driveway. None of these options are time and cost efficient.
- Shoveling: cost efficient but time consuming and tiresome
- Electric snow plows: time efficient but super expensive
- Heated driveways: time efficient but super expensive
AutoMelter melts snow instantaneously for only $200
<table>
<thead>
<tr>
<th>Method</th>
<th>Price (USD)</th>
<th>Average time spent to clear driveway (mins)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shovel</td>
<td>20-60</td>
<td>~ 45</td>
</tr>
<tr>
<td>Electric Snow Plow</td>
<td>1,000-2,000</td>
<td>~15</td>
</tr>
<tr>
<td>Heated Driveway</td>
<td>8,000-10,000</td>
<td>~ 0</td>
</tr>
<tr>
<td>AutoMelter</td>
<td>90</td>
<td>~ 0</td>
</tr>
</tbody>
</table>
DRIVEWAY MOUNT MODEL
WHY IS AUTOMELTER IMPORTANT? (2)

According to the US Department of Transport, around 2,000 deaths and 140,000 injuries occur every year due to icy roads.

Gritters are really outdated (1942)
- They cost around $100,000 each and are only used seasonally.
- They start clearing the roads after the snow storm starts.
- They clean the streets sequentially and not simultaneously.
- They release a lot of greenhouse gases.

Around 1,000 elders die a year due to heart attacks endured while shoveling.
STREET MOUNT MODEL
WHAT IS AUTOMELTER?

It is a device that melts snow off a surface by automatically spraying a solution of ethanol, sodium stearate, potassium chloride, and water.

- A temperature sensor and a precipitate sensor work simultaneously to sense the presence of snow
- If there is snow, a signal is sent from the Arduino to an electric valve that is connected to the tank with the solution
- The valve is then connected to T-shaped pipe connection with holes in it, allowing the solution to flow on the surface.
- It consists of 4 subsystems: electronics, coding, build, and RemoteXY
REMOTEXY

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OFF ON
THANK YOU!