

CS 4873-A CSP | Spring 2021 | Instructor: Munmun De Choudhury
Therac-25 and the Boeing 737 MAX

Proposal Due:	January 29, 2021, 11:59pm Eastern Time
Format:	Approximately 3 pages, double spaced, 12 point font
Logistics	Submit as a PDF document on Canvas
Grading criteria:	<ul style="list-style-type: none">▪ Completeness▪ Writing▪ Insight into issues▪ Bibliography
Grade	30 points (3% of your overall grade)

In late 2018 and early 2019, two Boeing 737-MAX aircraft crashed¹. The cause was a software bug. For this homework, please research what caused those crashes and answer these questions:

1. Briefly describe the technical cause of the crashes
2. Pick three of the 'causal factors' from section 4 of Nancy Leveson's article "Medical Devices: The Therac-25" that you believe are also relevant to the Boeing accidents. For each, explain in detail how that factor applies in the case of the 737 MAX. Discuss how the situations are alike and different with respect to that factor. (Suggested about half a page each).

Please explicitly name the three causal factors from Leveson that you are applying to the 737 Max.

Please include at least three references, in APA format. It's OK for this assignment if they are articles in the popular press or blog posts. Later in the term we will do research focused on peer-reviewed sources.

¹ Wikipedia: https://en.wikipedia.org/wiki/Boeing_737_MAX_groundings
YouTube: <https://www.youtube.com/watch?v=a5P8CkVckmA>