Genie®

Embedded Software Development On Aerial Lifts

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About Genie:

- Manufactures mobile elevating work platforms, primarily boom and scissor lifts
- These lifts are used in a number of sectors, especially construction
- Headquarters located here in Bothell
- Multiple other locations in Washington, including Redmond and Moses Lake
- Many more locations across the world, including China, Mexico, and soon India

What I did:

- Focused primarily on the newest generation of scissor lifts, which will be released in a few weeks
- Worked on a number of bugs across three different generations of scissor lifts
- Worked on a couple larger updates, primarily updating our model detection to speed up the startup process

What I learned:

- How to develop software in an agile environment
- How to work on a long standing project rather than starting from scratch
- Ask for help when I get stuck for more than a few minutes

Challenges:

- Learning the existing code base, which relies on a number of different submodules and code existing in different places
- Learning the various tools took time, primarily Rhapsody and Lauterbach
- Debugging is especially difficult with embedded systems. Even with Lauterbach, it was still tough because causes were not only software but sometimes hardware issues