321 Term Project: 2.4 GHz Jammer

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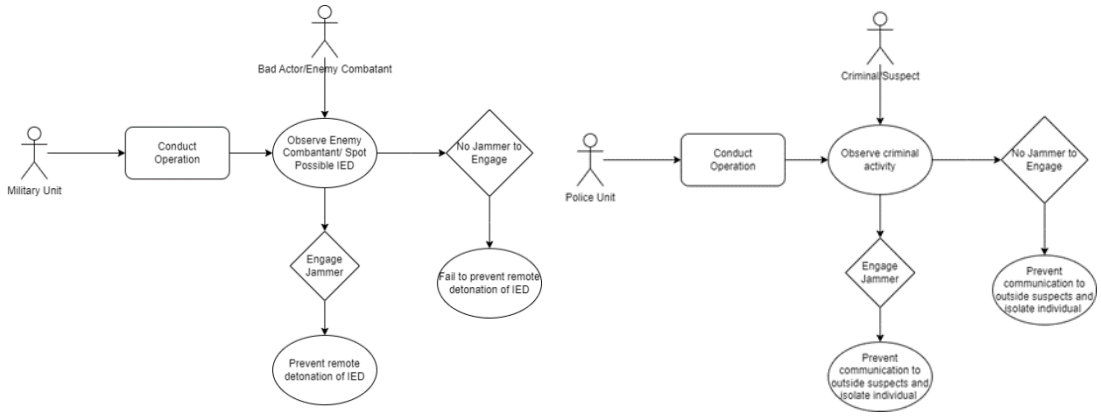
CSE 321: Realtime Embedded Systems

Problem: Remote Trigger on 2.4 GHz

A Problem modern military units face is the Improvised Explosive Devices (IED's). In Iraq and Afghanistan more services members were killed from IED's than any other cause. Often these explosives were triggered remotely with anything from a tv remote, car key, to wired panels, and cell phones. To combat this often units would carry jammers with varying success. The best solution was found to be armoring vehicles against this threat. I aim to make a jammer operating on the frequencies commonly used (2.4 GHz) that is smaller than what was in common use during these wars. This has further used within Law Enforcement to Counter Terrorism, especially if these devices can be made smaller.

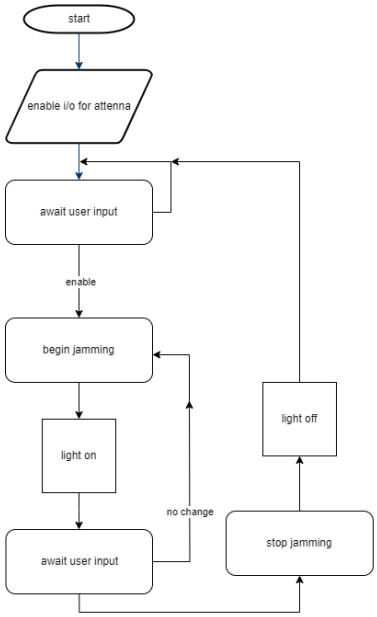
UML Use Case Diagram

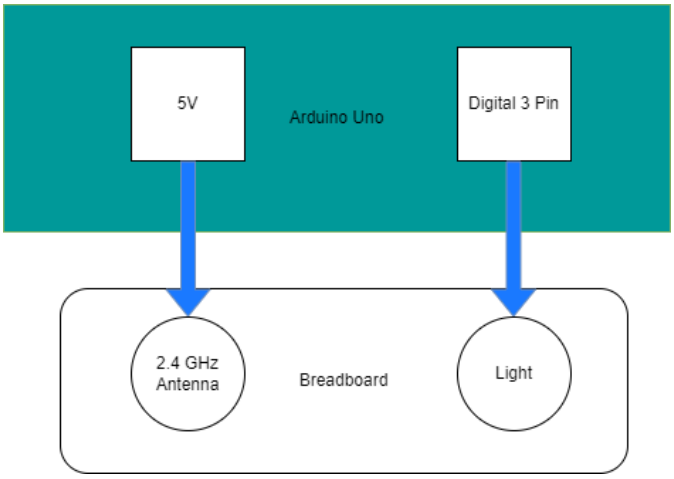


Classes, Responsibilities, and Collaboration Card

Jammer	
Hardware	2.4GHz antenna
	Arduino Uno
	Breadboard
	light
Software	Startup
	toggle
	jamming code

Flow Chart and Architectural Block Diagram





Component List

2.4 GHz Antenna	Ready for Order
Arduino Uno	On hand
Light	Ready for order
Wires	Ready for order
Mini Bread Board	Ready for order