

Honors Thesis Ideas

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- priorities
 1. Linux-related?
 2. security-related?
 3. a few interesting ideas
- what do I love right now?
 - L^AT_EX
 - Vim
 - GNU/Linux
 - terminals, CLIs
 - tiling window managers
- what am I interested in learning more about?
 - Linux kernel development
 - computer security
 - Linux kernel security?
 - machine learning

Table 0.1: Some project ideas sorted (-ish) by most to least interesting/relevant.

Idea	Description	Feedback
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<i>Collaborative vim</i>	•	

Table 0.1: Some project ideas sorted (-ish) by most to least interesting/relevant. (*continued*)

Idea	Description	Feedback
<i>vish</i>	<ul style="list-style-type: none"> • A configurable POSIX-compliant UNIX shell inspired by my love for Vim • Vimkey bindings for all basic text editing features and oft-used commands • All key bindings are fully customizable • Macros to build shell scripts and execute them on the fly • Unsure about some implementation details like using a Vim buffer etc. 	
<i>Requirements Analysis Document Generator</i>	<ul style="list-style-type: none"> • Some kind of generator for requirements analysis documents • Inspired in part by my own custom document generation for 3004 • Probably a Qt based GUI • Helps users input and categorize FR and NFR • Tailored diagram drawing for UML diagrams • Possibility for automatic generation of diagram layout (this could be a project in and of itself) • Puts everything together in PDF format by generating L^AT_EX code and passing it to pandoc. 	