

**18500: Capstone Log**

| WEEK                | Task(s) Completed  | Status          | Comments   |
|---------------------|--|-----------------|--|
| Jan. 20-26          | - Reused/edited FPU adder from 18340<br>- Reused/edited FPU multiplier from 18340  | On time         |  |
| Jan. 27 -<br>Feb. 2 | - Made a FPU square root module<br>- Discussed with David about optimizing the FPU for the FPGA<br>- Created a rough FPU block diagram   | On time         | *Need to test for correctness more vigorously<br>*The square root module does not handle denormal numbers well                         |
| Feb. 3-9            | - Made a FPU division module<br>- Read assigned reading for Capstone<br>- Made a program to randomly generate FPU test cases<br>- Debugged division module                       | One time        | *Division Module has multiple errors [FIXED 2/7/19]<br>**NOTE: the current tests show some of the FPU results to be very slightly off. |
| Feb. 10-16          | - Met with David to learn/discuss how to rewrite the FPU in terms of System Verilog functions<br>- Started to functionalize modules (Functionalized division and multiplication) | A little behind | *Needed to spend time on other classes<br>*Make rounding function for FPU  |
| (Feb. 17-23)        | - Finish rewriting FPU in terms of functions<br>- Test/debug the FPU<br>- Work out a better way to pipeline FPU  | n/a             | *Might not really get into pipeline until next week  |