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|  | Mind Games |

Memo

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| To: | Dr. Song |
| From: | Joseph Doherty, Robert Fendricks, Ian Kowalski |
| cc: |  |
| Date: | April 14, 2014 |
| Re: | Week 5 Progress Memo |
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**Summary of Last Meeting**

* Discussed current plans for neural network
* Discussed Ian’s plague
* Discussed Final Report

**Current Status**

* Working on implementing key features of hardware neural network
* ZYBO boards received
* Learning how to use Zync platform

**Work Done**

* Began work on final paper (ALL)
* Activation Function has been chosen and implementation started (ALL, IK)
* Critical register banks implemented for data movement (JD)
* Back propagation algorithm started (RF)
* Multiplier completed (IK)

**Current Objectives**

* Look into embedded system on the zync
* Learn how to use on board ram with zync
* Update module generation scripts
* Implement Activation Function
* Implement Summation module
* Derive back propagation algorithm

**Future Objectives**

* Implement unit controller
* Connect internal components for units
* Explore Programmable Logic and Processor communication

**Final Objectives**

* Units finished
* ARM programmed
* Network connected
* Network tested

**Red Flags**

* Behind on Zync data, no additional information come with boards
* Senior Design Symposium on Wednesday