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### **Research Area: Cyber Security**

The Lotan project will provide the laboratory with a platform for experimentation and analysis of potentially malicious software in bulk. It will combine a Map-Reduce architecture (Hadoop) with virtualization (VMware) to enable safe analysis of potentially malicious software. First, the potentially malicious code files to be analyzed will be distributed among multiple virtual machines using Map-Reduce. Each virtual machine then runs malware detection utilities on the distributed files to find any anomalies. The results of this analysis will facilitate malware detection when dealing with large amounts of code files.

### **Research Mentor:**

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