**Capstone Design Project Proposal**

**Title of Project:** TA Management System

**Date:** June 21, 2018

**Proposer**: Debra Duke, Instructor, College of Engineering, Computer Science, s2dmduke@vcu.edu (804) 828-7135

**Project Title:** TA Management System

**Unmet Need – Engineering Problem to be Addressed:** Administer the large number of undergraduate Teaching Assistants needed for the numerous Computer Science courses offered at VCU to facilitate communication between students, TAs, and faculty. Efficient and accurate recording of student performance in lab along with the ability to evaluate current and potential TAs is needed as enrollment increases in undergraduate courses. The system should facilitate reporting of lab grades and monitoring of Discussion Board threads on the Blackboard Learning Management System (LMS) using the Learning Tools Interoperability (LTI) standard and the Blackboard API.

**Proposed Deliverables:**

* TA communication and lab management system

**Anticipated Resources Required:**

* Remote Cloud Web servers
* Remote Database

**Anticipated Skills required**:

* Knowledge of database theory
* Knowledge of web development
* Use of API for data exchange
* Experience as a teaching assistant, tutor, or other role working with students is helpful though not required

**Other Information:**

Professor Duke and Professor Budwell will give business requirements to the students.

* Reports Requirements
* Input/output
* Data flows