SUMMER INTERNSHIP WITH URS CORPORATION
NICK VANDAM
Junior – Electrical/Computer Concentration

Company Overview

URS Corporation is a fully integrated engineering organization with the capabilities to support every stage of the project life cycle. The Company offers a full range of program management; design and engineering; information technology; construction and construction management; and decommissioning and closure services.

What is ITS?

The Intelligent Transportation Systems (ITS) group at URS is a multi-faceted collection of engineers, planners and technicians working on projects tasked with the development of:

- Signal optimization upgrades
- Traffic signal design
- Wireless communication analysis and design
- ITS design and technology support during construction
- Fiber optic network design, and optimization

Personal Objectives

Tasks assigned to me included:

- Database development and modification
- Communication analysis and design
- Database construction
- Publishing of the monthly performance report
- Development of ITS communication methods
- Research into potential statewide video-sharing solutions for MDOT
- Documentation Review

Project Experiences

1.) Researching hardware upgrades for the City of Kalamazoo’s Traffic Maintenance Center
2.) Designing a statewide traffic video sharing operation for MDOT
3.) Designing communication methods and researching hardware for the City of Battle Creek’s traffic operations system
4.) Installing 20 Closed-Circuit Televisions in the southwest region of Michigan
5.) Installing 4 Dynamic Message Signs in the southwest region of Michigan
6.) Day-to-day operations and surveillance at the West Michigan Traffic Operation Center

Skills Learned

- Time management
- Client and vendor interaction
- Communication systems
- Project design process
- Project budgeting and estimation

Implications for Engineering

- Ensures safety of roadways
- Increases efficiency of operations
- Consistently updates communities
- Assists in logistics of transportation
- Improves communication through technology

References