

CCRS

Comprehensive Conference Registration System

Software Plan

Requested by:

Dr. Darren Lim
Professor of Computer Science
Siena College
Loudonville, NY

Prepared by:



S.E.E. Solutions
Kelly Bedard – Team Leader
Tyler Mann – System Admin and Co-Webmaster
Jess Reinhardt – Document Developer and Analyst
Brett Rudloff – Visionary Leader
Carl Tompkins – Webmaster

September 21, 2012

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System Definition

1.1 Problem Definition:

In the spring of 2013, Siena College will be hosting the CCSCNE (Consortium for Computing Sciences in Colleges – Northeastern Region) Conference. This conference has many components such as having submission by researchers in the field that are reviewed and workshops led by some of these individuals on their work. Various students and faculty are participating in the CCSCNE. In addition to the conference, there is a programming contest where teams of students compete to solve problems. Teams also have advisors who help train the students prior to the competition. In order to present at the conference, a paper or abstract must be submitted. Assigned reviewers must review the paper or abstract before acceptance. Currently, the registration process for all of these different participants is not adequate for Dr. Darren Lim, professor at Siena College and co-chair of the CCSCNE this year. The reviewing process for papers and abstracts is currently done mostly by hand and Dr. Lim is not satisfied with this. Dr. Lim has requested that S.E.E. Solutions create a web interface for the registration process so that users have a simple and elegant way to register for the variety of different participants available. Dr. Lim has also requested that S.E.E. Solutions create a way for reviewers to be assigned in a more efficient way.

1.2 System Justification

Dr. Lim has stated several issues with the CCSCNE registration process. The issues include the ability for users to see meaningful information and the paper submission and review process. Dr. Lim has requested for a person to be able to sign up for the job that the person is doing. Dr. Lim has also stated after signing up, users should have quick access to only the information the users need in order to make the site easier to navigate and understand. Our software will aim to make the registration process more defined and simple for registration and paper submission and review. In addition to improving the registration our software will make the information posed to users relevant to what that user should be seeing.

1.3 Goals for Project and System

The main goal for this project is to create a system that will assign reviewers for papers, workshop abstracts, tutorial abstracts, and demo abstracts. Another goal for this project is to have a web interface for registration to the conference. Our client, Dr. Lim, would like for users under him to be able to have access to the information about the conference, but only the information they need to know based upon the users' role.

1.4 Constraints to the System and the Project

CCRS must be designed in the server side language PHP and store its data in a MySQL database. Due to the vast array of users, CCRS must be able to run effectively in any of the four major browsers: Internet Explorer, Mozilla Firefox, Google Chrome, and Apple Safari.

1.5 Functions to be Provided

CCRS will provide the following functions:

- The ability for conference attendees to register for the conference and track attendee payment
- Allow programming contest participants and faculty sponsor to register
- A system to submit and review papers for the conference, as well as notify authors of paper acceptance or rejection
- The ability to submit workshops and notify submitters of acceptance or rejection
- Allow demo, tutorial, panel, and faculty poster submitters to register their work for the conference, as well as notify of acceptance or rejection

1.6 User Characteristics

- Authors must be able to
 - submit papers
 - input E-Mail addresses in order to be notified on acceptance or rejection
- Attendees must be able to
 - register for the conference
 - pay for their registration
- Reviewers must be able to
 - register to be a reviewer
 - be assigned to a paper or abstract to review
- Conference Employees and Chairs must be able to
 - access the necessary information to perform their job

1.7 Environments

1.7.1 Development Environment

Our Mac is an iMac (model identifier: iMac12,1)
Mac OS X Lion, version 10.7.4
Intel Core Processor (2.5 GHz)
4 GB of Memory

Our PC is an OptiPlex 760
Windows Vista Enterprise (build 6002)
Intel Core Duo Processor (2.93 GHz)
4 GB Memory

Our server is an x86 64 PC
Hostname: oraserv.cs.siena.edu
CentOS 5.2 (final)
Kernel: 2.6.18-92.el5
Intel Xeon 2.66 GHz CPU
8 GB of Memory
Java SE Runtime Environment (build 1.6.0_10-rc-b28)
GCC Version 4.1.2 20071124 (Red Hat 4.1.2-42)
Python 2.4.3

1.7.2 Operating Environment

The operating environment for this project will be a web based application running on an oraserv database server.

1.7.2 Maintenance Environment

The maintenance environment for this project include the computers in the Software engineering lab as well as any of the software used on those machines to maintain the project, such as Adobe Dreamweaver, Photoshop, Mozilla Firefox, Google Chrome, Internet Explorer, and more.

1.8 Solution Strategy

S.E.E. Solutions will use the following solution strategy to complete CCRS in a timely fashion:

- Software Plan- The software plan will define the problem, the goals, and expectations of the client Dr. Lim, and will briefly explaining how the problem will be solved.
- Requirement Specification – The requirement specification will include the list of requirements described by Dr. Lim.
- Preliminary Design – The preliminary design will be a draft of a solution that will solve Dr. Lim's problem and meet the needs described in the requirement specification
- Detailed Design – The detailed design will change the Preliminary design of CCRS into a more detailed and refined version.
- Acceptance Test – The acceptance test will test the final product defined in the detailed design to make sure the product meets all of Dr. Lim's needs

1.9 Priorities of System Features

CCRS will provide a solution so that all registration and payment abilities can be managed in one single web interface. CCRS will handle the many different types of users and the various security roles that are required for each role. Another high priority requirement of the CCRS is to be able to properly handle paper submission including the ability to assign reviewers to a paper for review. Furthermore, CCRS will be developed such that the system runs efficiently in a mobile environment such as the iPad or other mobile devices is desired, but not required of the system.

1.10 Acceptance Criteria

CCRS will fulfill the requirements requested by Dr. Lim. CCRS will also fulfill Dr. Lederman's expectations for the project, who is an Associate Professor at Siena College that teaches the Software Engineering course.

Project Plan

2.1 Project Management & Development Model

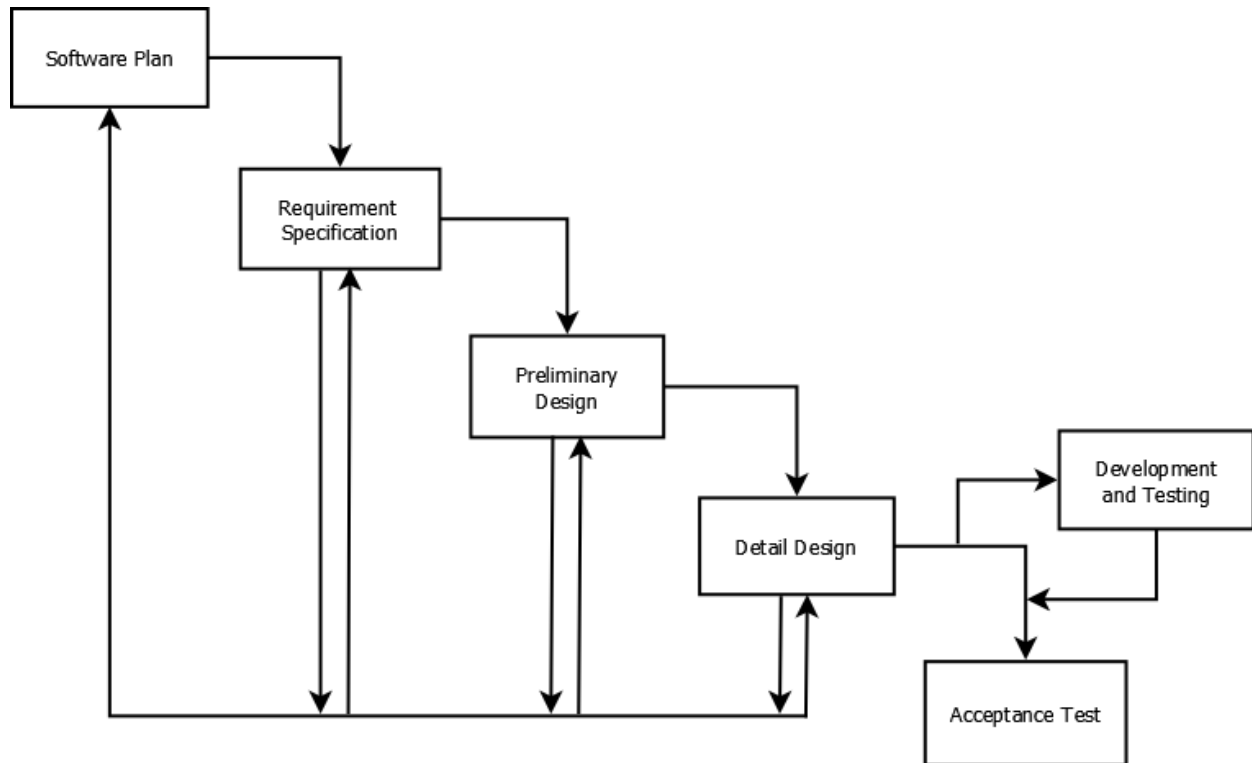


Figure 2.1: Modified diagram of the Classic Waterfall model.

Software Plan

S.E.E. Solutions will determine the problem that Dr. Lim needs to be solved. Expectations, goals, and a brief explanation of a solution will also be found.

Requirement Specification

By way of client and teams meetings S.E.E. Solutions will find extensive specifications and requirements at the request of Dr. Lim.

Preliminary Design

Using the software plan and requirement specifications S.E.E. Solutions will outline a design of the desired solution

Detail Design

The preliminary design will be built upon and the execution of CCRS will take place.

Developing and Testing

CCRS will continue to be developed and be regularly tested.

Acceptance Test

The final draft of CCRS will be completed and tested.

2.2 Organizational Structure



Name	Email	Role
Kelly Bedard	kt29beda@siena.edu	Team Leader
Tyler Mann	tr08mann@siena.edu	System Admin/Co-Webmaster
Jessica Reinhardt	jn18rein@siena.edu	Document DA
Brett Rudloff	bj25rudl@siena.edu	Visionary Leader
Carl Tompkins	cl05tomp@siena.edu	Webmaster

Team Leader: Kelly Bedard

The team leader has the responsibility of setting up and running client and team meetings. The team leader needs to make sure that people are there on time and that the jobs that the team leader is giving out are being done correctly and in a timely manner.

Webmaster: Carl Tompkins

The web master has the job of creating the team website and maintaining the team website. Maintaining the team website will include putting up relevant documents as they are created throughout the year and making sure that everything is easy to access for the team and the client.

System Administrator/ Co-Webmaster: Tyler Mann

The system administrator's job is to make sure all of the software/hardware is up-to-date and working properly. If new software is needed then the software's installation is the job of the system administrator to either tell the team leader or figure out a way to provide the software. The co-webmaster assists the webmaster in creating the team website and keeping the website up to date.

Document Developer and Analyst (DA): Jessica Reinhardt

The document DA has the job of recording the notes at the team meetings and at any client meetings they are in attendance.

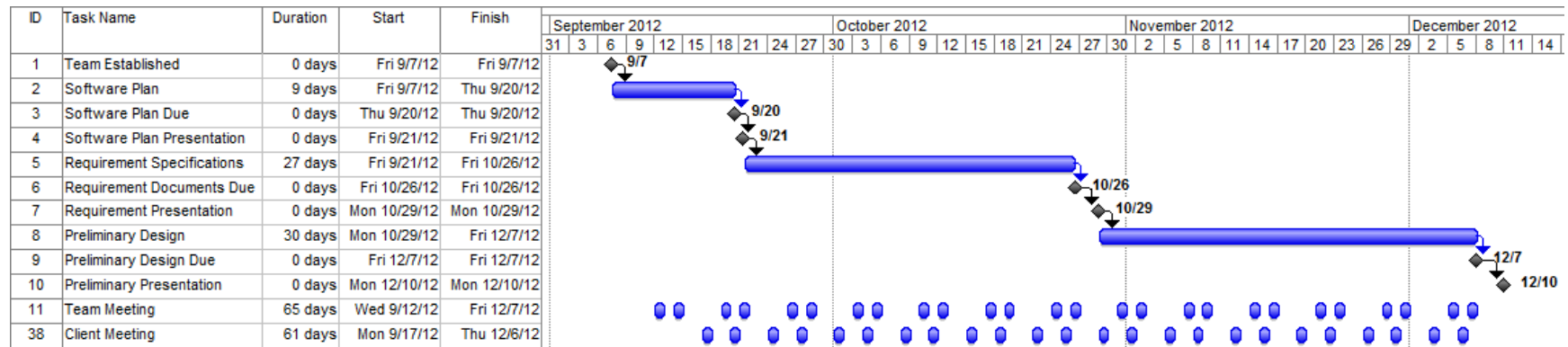
Visionary Leader: Brett Rudloff

The visionary leader is tasked with the job of designing the software and making sure that all the specs and requirements given during the client meetings are met. If any of the specs are unclear the visionary leader has the responsibility of meeting with the client and/or team leader to make sure everything is clear.

2.3 Preliminary Staffing

The five members of S.E.E. Solutions will collaborate among themselves, with their client Dr. Lim and with faculty member Dr. Lederman. S.E.E. Solutions will be using the resources in the Software Engineering Laboratory (Roger Bacon 348), which include an iMac and PC computer (see section 1.7). S.E.E. will use the skills learned working on past projects and in past classes.

2.4 Development Schedule – Timeline (Gantt Chart)



Task		Milestone		External Tasks	
Split		Summary		External Milestone	
Progress		Project Summary		Deadline	

2.5 Project Monitoring Mechanism

To keep in contact with the client about the progress of the project S.E.E. Solutions will have two meetings with Dr. Lim a week. S.E.E. Solutions will also hold team meetings at least once a week to discuss the outcomes of the client meetings. Email communications will be used to keep in touch with the client about the project and meeting times. Email will also be used to keep the group informed.

2.6 Tools and Management to be Used

For this project S.E.E. Solutions will be using our knowledge of previous courses and experiences. These courses and experiences include but are not limited to:

- Object Oriented Programming design, Web Application Development, Database, and additional internships or work experience of our team.

Some specific applications S.E.E. Solutions may use are:

- Dreamweaver or combination of Notepad++ and Filezilla FTP Client
- Microsoft Office 2007 or 2010 Suite
- Microsoft Project
- Internet Explorer
- Mozilla Firefox
- Google Chrome
- Safari

This list may be subject to change depending on our client's desires and/or new developments

2.7 Programming Languages

The programming languages that will be used to implement this new system are HTML, CSS, JavaScript (jQuery), PHP and SQL. This list may change as the project continues.

2.8 Testing Requirements

S.E.E. Solutions will thoroughly test all of the code that is developed. Test cases will be developed in collaboration with the client, Dr. Lim, to ensure that all criteria is met and so that sensitive data is kept safe for the registering users. In addition to testing during the development process, S.E.E. Solutions will test during the acceptance test to confirm that all requirements were met and work properly.

2.9 Supporting Documents

S.E.E. Solutions will create many supporting documents while CCRS is being developed. Once these documents are finished SEE Solutions will provide the documents to Dr. Lim to keep the client up to date on the development process. These documents include:

- Software Plan
- Requirement Specification
- Preliminary Design
- Detailed Design
- Acceptance Test

2.10 Time of Delivery and Presentation

The supporting documents will be delivered and presented to Dr. Lim on the following dates:

Title of Documents	Date of Delivery	Date of Presentation
Software Plan	September 20, 2012	September 21, 2012
Requirement Specification	October 26, 2012	October 29, 2012
Preliminary Design	December 7, 2012	December 10, 2012

The Detail Design and Acceptance Test will be delivered and presented sometime during the Spring 2013 semester. The specific dates have yet to be established but will be determined as soon as possible.

2.11 Sources of Information

Information will be obtained from Dr. Lim in a majority of cases throughout the year. Information received will be by way of client meetings taking place twice a week. Alternative information will be found using previous CCSCNE web sites.

Appendices

Appendix A - Resumes

Kelly Bedard

Tyler Mann

Jessica Reinhardt

Brett Rudloff

Carl Tompkins

Kelly Bedard
115 Franconia Circle
East Longmeadow, MA 01028
413-478-2351 ▪ kt29beda@siena.edu

Education

Siena College, Loudonville, NY
Bachelor of Science Computer Science Minor in Mathematics and Business Expected to graduate May 2013
Cumulative GPA 3.67, Computer Science GPA 3.74

Honors/Awards

- Deans' List Fall 2009, Fall 2010, Spring 2011, Fall 2011, Spring 2012
- Inducted into Upsilon Pi Epsilon, Computer Science National Honor Society
- Presidential Scholarship, Tech Valley Scholarship, Byrd Honors Scholarship
- Recipient of the Grace Hopper Scholarship to attend conference

Skills

- Languages: Proficient in Java, Python, SQL Familiar with C, PHP, HTML
- Programs: Oracle Database, Microsoft Familiar with Linux MS Word, MS Excel, MS Power Point, Website Design

Relevant Experience

Team Leader, Siena Software Engineering, Loudonville, NY Fall 2012

- Managed a group of 5 students on the design aspect of a year-long software development project
- Setup meetings with client to discuss progress of project

Research Assistant, Siena College, Loudonville, NY Fall 2012

- Transferred Database from Access to Oracle
- Mined Tuberculosis Data to categorize different strains of Tuberculosis

Research Experience for Undergraduates, Suffolk University, Boston, MA Summer 2012

- Measured emotionality of posts on blogging Social Network website
- Extracted data from database using Python script
- Wrote script to perform time series correlations on data
- Completed a final paper and presentation

Research Experience for Undergraduates, University of Rhode Island, North Kingston, RI Summer 2011

- Extracted data from cell phones with multiple forensic tools
- Compared results and found gaps in the tools to help law enforcement
- Wrote a tool report on a mobile forensic tool
- Wrote a proposal and final paper for project

Additional Experience

Bob's Stores, Frontend Associate, Enfield, CT August 2007- Present

- Cashiered customers
- Opened and Closed front end

Relevant Courses

- Introduction to Comp Science, Programming, Data Structures, Computer Architecture and Assembly Language, Discrete Math I, Discrete Math II, Calculus II, Networks and Communication, Object-Oriented Programming, Analysis of Algorithms, Database Management, Web Application and Development, Advanced Database Management.

Activities/Clubs

Association for Computing Machinery-Women Siena College (Treasurer Junior)

Relay for life

Tyler Mann

Present Address:
Siena College, SPOB 2706
515 Loudon Rd
Loudonville, NY 12211
Phone: (518)321-7225

Permanent Address:
38 Quevic Dr
Saratoga Springs, NY 12866
Phone: (518)584-8734
Email:tr08mann@gmail.com

EDUCATION

Siena College, Loudonville, NY
B.S. in Computer Science, May 2013 (expected)
Honors Fellow

EXPERIENCE

System Administrator & Co-Web Developer, Software Engineering, Siena College,
Loudonville, NY, September 2012-Present

- Maintain software and hardware on development machines
- Collaborative develop team website and solution website

Business Intelligence Intern, Nfrastructure, Clifton Park, NY, May 2012-Present

- Create tables, tablespaces, indexes, security permissions, and ETL mappings
- Utilize OBIEE Admin tool to set up Business Layers and create OBIEE Answers Reports
- Research and develop technical documentation for various projects

Student Manager, Information Technology Services, Siena College, Loudonville,
NY, September 2009 - Present

- Lead and train 30+ student consultants
- Liaison between full time User Services staff and student consultants
- Create further training and reference material for everyday use

Geek Squad Agent, Best Buy, Saratoga Springs, NY, September 2008-January 2012

- Work with customers to identify, diagnose, and resolve technical issues
- Follow client confidentiality protocols and procedures
- Help train new Agents with procedure and methods of department

COMPUTER SKILLS

- Web Design and Development:
 - Development with PHP, HTML 5, CSS 3, Javascript, jQuery
- Database:
 - Create database and queries in MySQL and Oracle
 - Business Intelligence: Toad, Informatica
- Programming Languages: Java, Python, C,

ADDITIONAL EXPERIENCE

Design and construct PHP survey and storage to MySQL database

ACTIVITIES OR COMMUNITY SERVICE

President, Volunteer Ministry Club, Siena College, May 2011-Present
Member, Student Conduct Review Board, Siena College, Fall 2010-May 2012

Jessica N. Reinhardt

Temporary 515 Loudon Road Loudonville, NY 12211 SPOB 3606

Permanent 12 Pinewood Place Albany, NY 12205

jn18rein@siena.edu | 518-248-1440

EDUCATION

Siena College, Latham, NY

Fall 2009 - Present

Bachelor of Science, Computer Science; *Minors*, Math, Business, Multimedia, *May 2013*

Presidential Scholarship; Equinox Scholarship – awarded yearly

2009 - Present

COMPUTER AND LANGUAGE SKILLS

Skills: Proficient in Java, BlueJ, HTML, CSS, MySQL, MS PowerPoint, MS Word, MS Excel, MS Publisher, Photoshop. Knowledgeable in PHP and the Spanish Language.

RELEVANT EXPERIENCE

SIENASAINTSBLOG.COM, *Web Developer* – Latham, NY

May 2012 - Present

Conceptualizing new product ideas from design to implementation.

Utilizing open source code bases and APIs like WordPress and ESPN API to create new features.

Utilized client side code, server side code, and design tools such as Photoshop.

SPORTS MODELING AND ANALYTICS

September 2012 - Present

Independent Study with Dr. Mary Anne Egan - Siena College, Latham, NY

Gaining experience with iOS App Development with the assistance of Dr. Egan.

Developing app to facilitate the collection of data

Developing model to determine optimal set of players on basketball court at a given time to provide best chance of winning.

SOFTWARE ENGINEERING, *Document Analyst and Developer* – Latham, NY

September 2012 - Present

Collaborating directly with a client on a team of five to unravel and solve a problem.

Oversee every document that is handed in, presented or edited on our website.

Joining forces with the five team members in the creation of our team website and program website.

BBL MANAGEMENT SERVICES, *Database Creator and Administrator* – Albany, NY

May - August 2012

Developed and maintained a database using MySQL.

Assisted in day-to-day operations of management offices.

Assisted controllers and accountants with notifying entities and tenants of payments due and received.

ADDITIONAL EXPERIENCE

SIENA MEN'S BASKETBALL, *Head Manager* – Latham, NY

September 2009 - Present

Supervise all other managers in terms of delegating duties and scheduling.

Attend most practices on a day-to-day basis.

Assist in the capturing and breakdown of film.

SIENA COLLEGE, *President – Women in Computer Science Club* – Latham, NY

September 2009 - Present

Coordinate monthly meetings, oversee eight positions and committee chairs

SKILLS & ACTIVITIES

AMBASSADOR, *Tour Guide* – Admissions Department, Siena College

September 2011 - Present

GRACE HOPPER CELEBRATION OF WOMEN IN CS, *Attendee*

Fall 2010 - Present

Brett Rudloff

198 S Highview Avenue, Pearl River, NY 10965
bj25rudl@siena.edu ~ cell : (845) 641-8072

Education:

Siena College: Loudonville, NY
B.S. in Computer Science; Minor in Business, May 2013
Average in Major: 3.28

Achievements:

Presidential Scholar:	Siena College	All Years
Dean's List:	Siena College	2011

Computer Skills

Proficiency in:

Java, PHP, HTML, CSS, JavaScript, jQuery, SQL, Ruby

Familiar with:

Assembly Language, AJAX, UNIX, Objective-C

Related Experience

General Electric Schenectady, NY May 2012 – present

- Maintained websites and kept data on them up to date,
- Populate different templates by putting data into the HTML
- Implementing cross browser testing for a standard way to test web applications.

Software Engineer, Visionary Leader September 2012 – present

- Lead the design of the software that we are working with.
- Help with other tasks that are needed

Sports Technologies LLC Collinsville, CT May-August 2011

- Monitored for performance and unusual activity on a customer website used to link to Company written games (www.fannation.com).
- Learned the Ruby on Rails web framework.
- Collaborated with developers by analyzing code and helping to resolve problems.

Work Experience:

MAC Sports Complex – Siena College	Loudonville, NY	Sept.2009 – Present
Abbey Ice Company	Spring Valley, NY	May-Aug 2010

Extra-Curricular Activities:

Soccer:	Intramural – Siena College	All Years
Football:	Intramural – Siena College	All Years
Lacrosse, Soccer, Track:	Varsity – High School	All Years

Carl Tompkins

30 Capitol Place, Rensselaer, NY 12144
518-703-4209 email: cl05tomp@siena.edu

EDUCATION:

Bachelor of Science, Computer Science, May 2013
Siena College, Loudonville, NY
GPA 3.75

PROGRAMMING LANGUAGES:

Java, PHP, HTML, CSS, Javascript (jQuery), MySQL
C/C++, Python familiar

RELEVANT COURSE WORK:

Intro to Programming	Assembly Language	Database Management
Data Structures	Operating Systems	Advanced Web Development
Analysis Of Algorithms	Robotics	Software Engineering
Discrete Mathematics 1 & 2	Computer Graphics	

EXPERIENCE:

Siena Athletic Forms Webmaster (1/2011-Present)

- Designed, implemented and maintained Siena Athletics student NCAA forms
- Used PHP,MySQL,jQuery to develop an online form solution

Webmaster, Software Engineering, Course (9/2012-Present)

- Worked on a team of 5 to develop software for client
- Designed and maintained team website

SAWUS: Siena's Automatic Wikipedia Update System (5/2012-Present)

- Worked with partner to develop software for NIST TREC Competition
- Designed and implemented system that searches internet for Wikipedia entities

STIRS: Siena's Twitter Information Retrieval System (5/2011-11/2011)

- Worked on team of 6 developers for NIST TREC competition
- Designed and implemented IR system to find Twitter tweets matching a user query
-

AWARDS AND ACHIEVEMENT:

Dean's List, Spring 2011, Fall 2011, Spring 2012
Participated in Qualifying and Regional ACM Programming Contest
Student researcher for Siena College

Appendix B - Glossary of Terms

CCRS – (Comprehensive Conference Registration System) The name of the project S.E.E. Solutions is creating

CCSCNE – (Consortium for Computer Science in Small Colleges North East) The name of the conference CCRS is being made for

Chrome – A web browser created by Google

CSS – Cascading Style Sheet are used to design the layout of a website

Dreamweaver – A web development application created by Adobe

Filezilla FTP Client – A software used for web development

Firefox – A web browser created by Mozilla

Gantt Chart – A chart that illustrates a project schedule by showing the start dates and end dates of the specific elements of a project

HTML – (Hypertext Markup Language) A scripting language used to create the layout of a website

Internet Explorer – A web browser created by Microsoft

jQuery – used to simplify the client-side of scripting of HTML

MySQL – an open source Relational Database Management System

Notepad++ - A tool developed to support scripting of many languages including web development

OpenProj – An open source project management application

Safari – A web browser created by Apple

SQL – (Structured Query Language) – A language used to extract information from a database

Photoshop – A photo developing tool created by Adobe

PHP – (PHP Hypertext Preprocessor) a server side scripting language used for web development