

MADRINA THAPA

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Education

Master of Science in Computer Science Aug 2016 - May 2018
Indiana University, Bloomington

Bachelor of Engineering - Computer Science and Engg. Aug 2009 - May 2013
Government College of Technology, Coimbatore, India

Work History

.Net and Powershell Developer - UITS, Indiana University Dec 2016 - Present
C#, Visual Studio 2015, .Net MVC framework, Microsoft SQL Server, Office 365,
SharePoint Online, jQuery, Ajax, PowerShell

- Integrated Office 365 with existing directory and on-premises environments.
- Developed and deployed new features of the application like audit trail, requesting a new group or account on Office 365.
- Developed Powershell scripts for connecting active directory with Azure active directory.

Senior Software Engineer - Mindfire Solutions Oct 2015 - Jun 2016
ASP.Net 4.5, C#, jQuery, CSS, HTML, SQL Server 2012, Visual Studio 2013, TortoiseSVN

- Developed personal health record (PHR) module which included information about every facet of a person's health.
- Created a tool for tracking blood pressure, cholesterol and blood sugar levels and automatically graphing the data for comparison using Highcharts API.
- Digitized and indexed all the medical records of a person into an easy to read and user-friendly format.
- Designed critical modules of the UI layer which included creating custom controls.

Software Engineer- Mindfire Solutions Aug 2013 - Oct 2015
ASP.Net 4.5, C#, jQuery, CSS, HTML, SQL Server 2012, Entity Framework 5.0

- Redesigned payment module resulting in improved vendor experience; average usability ratings increased by 2 points on a 10-point scale.
- Created user module, where a user can create a new proposal, add required products, design the proposal and either print or save final report on cloud using several available templates.
- Integrated Google APIs into the application - Google Drive, Google Calendar and Google Analytics.
- Developed a module for generating and viewing reports - it helped users to get an overview of the proposal, review and download them easily.

Projects

Kernel Programming in Xinu Operating System- C

- Created new system calls and shell commands in XINU. Implemented Semaphores and Futures for managing and synchronizing concurrent activities.
- Implemented in memory file system for XINU with standard file system primitives and implemented a shared memory Inter-Process Communication (IPC) in XINU using UDP to establish a network communication between the XINU and Virtual Machine.

Amazingly Local- Java 7, Spring 3.0, jQuery, AJAX, MySQL, JSP, and Bootstrap

- An online marketplace for locally grown products. Local vendors can publish their products such as vegetables, fruits, and dairy products online. Customers can browse the products and purchase them.
- Extended administrative functionality to view detailed reports of vendor profits, buyer reports and traffic statistics all of which are generated for weekly, monthly and yearly data.

Static Vs Adaptive Huffman Coding - C++

- Implemented both the Static and Adaptive Huffman coding in C++ and observed a difference between the execution time that is the time it takes for both compression and decompression, and the size of the compressed file.

Skills

Programming Languages



C, C++, C#, Java and Python

Web Technologies



AJAX, HTML5, CSS3, Bootstrap, ASP.Net using MVC, JQuery, JavaScript, Web Services, REST API

Databases



Microsoft SQL Server and MySQL

Frameworks



NET4.0/4.5, Entity Framework (EF), Spring, and Spring Boot

Others



TortoiseSVN, Git, Jira, Assembla

Certification

Web Applications Development with Microsoft .NET Framework 4 (2014) - MC ID: 10703235.

Personal Repository

github.com/madrinathapa

Relevant Coursework

- Advanced Operating Systems
- Algorithms Design and Analysis
- Software Engineering
- System and Protocol Security
- Pervasive Computing