HARSH P. VACHHARAJANI

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OBJECTIVE

Seeking a challenging position to apply my knowledge in the areas of Cryptography and Network Security.

EDUCATION

Master of Science in Information Security and Assurance

Expected May 2015

Thesis Title: Implementation of Secure Socket Layer in Windows Presentation Foundation

George Mason University, Fairfax, VA, U.S.A.

GPA: 3.3 (three semesters so far)

Bachelor of Technology - First Class, Major: Information Technology

May 2013

U.V. Patel College of Engineering (UVPCE) affiliated with Ganpat University (GNU), Mehsana, and

approved by All India Council for Technical Education (AICTE)

GPA: 3.87

WORK EXPERIENCE

George Mason University - Research Assistant

January 2014 - Present

Worked on a research project entitled "Portable Online Interactive Cyber Security Laboratory Exercises" under **Dr. Kris Gaj**, developing new laboratory exercises based on CrypTool 2 – an e-learning tool for studying cryptology.

Implemented encryption, decryption, and codebreaking for several historical ciphers, such as shift cipher, general monoalphabetic substitution cipher, Vigenere cipher, transposition cipher, Hill cipher, Playfair cipher, and Enigma, using CrypTool 2.

Implemented encryption, decryption and codebreaking for RSA with small key sizes, using CrypTool 1 and 2.

Tata Consultancy Services (TCS) – Student Web Developer Intern

January 2013 - April 2013

PAS (**Performance Assessment System**) – Project aimed at maintaining repository of data related to water supply and sanitation in urban areas of India, developed for Gujarat and Maharashtra Govt. Developed various modules as requested by clients in different cities, including a module responsible for converting financial data of respective cities to PDF. Used MVC Architecture (Java) and Liferay framework.

PROJECTS

Implementation and Simulation of SSL in Windows Presentation Foundation August 2014 – December 2014

Developed a stand-alone windows based application in C# using Windows Presentation Foundation to simulate and illustrate Secure Socket Layer (SSL).

Android Security and its applications

January 2014 – May 2014

Developed an android application in Java using Android SDK which would lock the selected apps and ask for authentication when needed to access it to enable confidentiality and privacy of the app.

Portfolio Investment

July 2012 - December 2012

Developed a desktop application in core Java, maintaining a record of the user's financial data, with two main modules, user and admin, allowing them to add/save/edit financial information in MySQL database.

Online Movie Ticket Booking

July 2011 - December 2011

Developed a web application in C#, allowing a user to book a movie ticket online, with features of looking at the seating arrangements, select a seat etc.

CERTIFICATIONS

Cryptography – I (Stanford University – Online Course)

TECHNICAL SKILLS

Cryptographic Software : CrypTool 1, CrypTool 2 **Programming Languages** : C, C#, Java, Python

Database Systems : Oracle, SQL Server, PL/SQL

Tools and Packages : NetBeans, Eclipse, Visual Studio 2012, MS Office

Web Designing Tools : HTML, JavaScript, CSS

SEMINARS / CONFERENCES ATTENDED

OSDFCon (Open Source Digital Forensics Conference)

Cyber Forensics and Exploration

Cloud Computing and Android OS

Ethical Hacking

November 2014

February 2013

March 2012

September 2011