Rija Sana

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OBJECTIVE

Seeking an innovative and challenging career to develop my experience and knowledge in the field of databases.

EDUCATION

Santa Clara University, Santa Clara, CA **2013-Present**
Masters in Computer Science and Engineering

Lahore University of Management Sciences, Lahore , Pakistan **2010-2012**
Masters in Computer Engineering

National University of Computer & Emerging Sciences, Lahore, Pakistan **2006-2010**
Bachelors in Telecom Engineering

TECHNICAL EXPERTISE

Hardware/Appliance: Serial Ethernet Board with Microchip's ENC624J600 Base-T Ethernet controller, EasydsPIC4 from MikroElektronika, Basys 2 Spartan-3E FPGA Board and Spartan-3 Starter Board FPGA Development board by Digilent Inc.

Programming Languages: C/C++, HTML, PHP, JavaScript, jQuery, Ajax, R, SQL,VHDL, Ruby.

Tools/Technologies: GSM system architecture, AES, DES, RSA.

Software/Applications: Microsoft Visual C++, Mariadb, MySQL, Hadoop, Weka, Rails, Wireshark Ethereal, WinPcap, Proteus, MatLab, MikroC PRO, Modelsim, HFSS, Openbts, LT-Spice, Electric binary, GNU Radio.

RELEVANT COURSEWORK

- Database Management.
- Data Mining.
- Machine Learning.
- Big Data and Analytics.
- Web Development.
- Network Security.

PROJECTS AND RESEARCH

Big Data Project and Research Paper:

Classified raw email data into spam/non-spam, using Naïve Bayes Algorithm in Weka and Hadoop. Analyzed and compared the performance of Naïve Bayes algorithm in Weka and multi node Hadoop.

Web Programming Project:

Designed an interactive web chat program allowing multi-user communication.

Database Project:

Designed a university library management system in Mariadb and created user interface using PHP and HTML.

Data Mining Project:

Performed sentiment analysis through data mining techniques to provide an automated way of opinion discovery and summarization.

Network Security Project:

Using a USRP board and OpenBTS software designed an IMSI Catcher acting as a false mobile tower between the target mobile phone and the service Providers**' real** towers.

Network Based appliance Automation Project:

Designed a power saving appliance automation system by reading the schedule electronically (e.g. in the form of an MS excel sheet) and then by controlling the electricity supply to a particular room according to the schedule by sending control signals via LAN.