

SAIYAM KOHLI

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EDUCATION

Master of Science, Computer Science [Sept 2004 – June 2006(expected)]

University of Minnesota, Duluth.

Bachelor of Information Technology [May 2004]

University of Delhi, Delhi, India.

SKILLS

Languages: C, C++, Java, Python, Perl, PHP, Visual Basic, Visual C++

Tools: GNU development tools(gcc, gdb, gprof), cvs, subversion, Bugzilla

Databases: MySQL, PostgreSQL, Oracle, MSSQL

Web Technologies: HTML, XML, CGI programming, Javascript, ASP, Java Servlets

Softwares: WEKA, SVMlight, Mathematica, MATLAB, GATE, WordNet::Similarity

Platforms: Linux, Sun Solaris, Microsoft Windows (95, 98, 2000, XP), Mac OSX

WORK EXPERIENCE

Graduate Research Assistant, NATSRL, University of Minnesota Duluth [Sept 2004 – June 2005]

Tools: C++, Java, Perl, WEKA

Platform: Unix/Linux

Objective: Identification of RWIS(Road Weather Information System) weather sensor malfunction.

Responsibilities: Implementation and application of machine learning algorithms on data from neighboring RWIS and NWS sites and analysis of results thus generated.

Graduate Research Assistant, ECE, University of Minnesota Duluth [Sept 2004 – January 2005]

Tools: C++, Mathematica, MATLAB

Platform: Windows 2000/XP, Mac OSX

Objective: Development of a stethoscope to identify pathological heart murmurs.

Responsibilities: Design and implementation of the algorithm to take a DFT of a sound sample, and implementation of regression and distance based machine learning algorithms.

Graduate Research Assistant, VDIL, University of Minnesota Duluth [June 2005 – August 2005]

Tools: Perl, WordNet::Similarity

Platform: Unix/Linux

Objective: Developed WordNet::Similarity::Visual, to visualize the path based measures implemented in WordNet::Similarity.

Responsibilities: Design, implementation and testing of WordNet::Similarity::Visual.

Intern, DRDO (Defense Research and Development Organization), India [January 2004 – August 2004]

Tools: C++, PHP, Perl, Apache, MySQL, Qmail

Platform: Linux

Objective: Open Source solution for web and mail servers and deployment of a firewall.

Responsibilities: Configuration and deployment of a Linux based firewall, a web server(Apache) and a IMAP mail server(Qmail), also wrote scripts to take periodical backup. Developed a wizard to allow quick configuration of firewalls and new web servers.

Graduate Teaching Assistant, University of Minnesota Duluth [Sept 2005 – Present]

Subjects: CS – 3111(Computer Ethics), CS-3121(Multimedia Systems) and CS1521(C++)

Responsibilities: Grading exams and homework, conducting labs, preparing and presenting course material.

PROJECTS

Text-NSP(Ngrams Statistics Package)

Tools: Perl

Platform: Linux/Unix, Mac OSX

Description: The project involves design and implementation of the Ngram Statistics Package(Text-NSP). Text-NSP allows users to count sequences of Ngrams in large corpora of text, and measure their association. Visit [Text-NSP homepage](http://ngram.sourceforge.net) for further details and the current status of the project <http://ngram.sourceforge.net>.

WebGrader

Tools: Perl, HTML

Platform: Linux/Unix

Description: Implemented a web based automated essay grader, as part of the Natural Language Processing course. It gives the user an essay topic and grades the users response based on various criteria like grammar, relevance to the topic, number of factual statements in the essay. To get the latest version of the WebGrader please visit <http://indautograder.sourceforge.net>.

WekaComparator

Tools: Perl, Java, WEKA

Platform: Linux/Unix

Description: Large Scale empirical study of the Machine Learning algorithms implemented in WEKA, using a set of standardized datasets, obtained from UCI repository.

C-Force

Tools: C++

Platform: Linux/Unix, Windows 98, 2000

Description: Implemented all the rounds of the AES award winning Rijndael encryption algorithm.

HOBBIES

Music, Reading, Hiking, Linux

REFERENCES

Available on request.