RAHUL R HUILGOL

http://rahul003.github.io

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EDUCATION

Institute	Indian Institute of Technology Guwahati	Guwahati, India
Degree	Bachelor of Technology, Computer Science and Engineering	2011 - Present
CPI	8.45 (after 4 semesters) on a scale of 10	
SPI	Most Recent – 8.62	
Institute Score	Sri Chaitanya Junior Kalasala [<i>Board: BIE-AP</i>] 96.1%	Hyderabad, India 2009 – 2011
Institute	Sanghamitra School [Board: CBSE]	Hyderabad, India

Projects Link to Projects on My Website

TITLE Machine Learning using CCA on Network Traffic Data Status: Ongoing

-2009

Guide Dr. Vijaya Saradhi, IIT Guwahati

Nature Summer Research Project

Score 94.4%

Details By representing network traffic data in different ways and maximizing correlation between these representations (using Canonical Correlation Analysis), we are trying to establish relationships between various features of the data.

TITLE Tweet Categorization Independent Project

Details Developed a system to classify tweets into categories using the principles of a binary Bayesian Classifier. This when used for the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second of the contest Twitminer (organized by IISc Bandara) as a second organized by IISc Bandara (organized by IISc Bandara) as a second organized by IISc Bandara (organized by IISc Bandara) as a second organized by IISc Bandara (organized by IISc Bandara) as a second organized by IISc Bandara (organized by IISc Bandara) as a second organized by IISc Bandara (organized by IISc Bandara) as a second organized by IISc Bandara (organized by IISc Bandara) as a second organized by IISc Banda

galore) gave an accuracy of over 90% and was ranked 26th in India.

TITLE Handwritten Digit Recognizer

Independent Project

Digit Second a system to recognize handwritten digits using langeleng algorithm. Used data

Details Developed a system to recognize handwritten digits using knn-algorithm. Used data from Kaggle.com for training and to evaluate performance.

TITLE Movie reviews using Sentiment Analysis of Tweets Independent Project

Details Currently working on a system, using NLP and ML techniques, to mine the sentiment of tweets on a newly released movie and analyze whether there is a positive or negative buzz on the movie.

TITLE Enhancing the kernel of Pintos

Guide Dr. Sajith Gopalan, IIT Guwahati

Details Augmenting the basic PintOS kernel (developed at Stanford) by adding various advanced OS constructs like Process Synchronisation primitives, schemes to run programs in user and kernel mode, file system management and virtual memory with demand paging etc.

Title 2 Pass Assembler Linker Loader for 8085 Python

Guide Dr. Santosh Biswas, IIT Guwahati

Details Developed a 2 pass 8085 assembler, linker and loader. It supports various new instructions (not in 8085 instruction set), looping capability and macros, which are converted to the 8085 assembly language accepted by GNUSim8085. It also detects various kinds of errors in syntax and semantics.

TITLE SyncBox - A file hosting and file synchronization service

Guide Dr. P.K. Das, IIT Guwahati

Details Led a group of 19 to develop a feature-rich file hosting service which supports automatic 2 way synchronization of files across various computers (Linux) similar to Dropbox. It involved use of Django framework(Python), SSH and few linux utilities.

TITLE A Human v/s Computer Game

Iava

Guide Dr. Saswata Shannigrahi, IIT Guwahati

Details Developed a fully functional (difficult to beat) implementation of the ancient board

game Kalaha. This gave me insights into basic Artificial Intelligence (Specifically,

Minimax and Alpha-Beta pruning).

More details, source code and more projects can be seen on my Website

TECHNICAL SKILLS

Programming Languages C, C++, Java, Python, UNIX Shell Scripting

Web DevelopmentHTML, CSS, Javascript, PHPOperating SystemsLinux, Microsoft Windows

Tools & IDE Visual Studio, Eclipse, Microsoft Office, LaTeX

Frameworks/Libraries Twitter Bootstrap, Scikit-learn, Weka

RESEARCH INTERESTS

Machine Learning Natural Language Processing Information Retrieval Operating Systems

Honors

- Secured an All India Rank of 1132 (in the top 0.2%) out of 4,90,000 participants in IIT-JEE 2011
- Secured an All India Rank of 2432 (in the top 0.2%) out of 10,60,000 participants in AIEEE 2011
- Stood 73 in KCET 2011 and 310 in EAMCET 2011, Engineering Stream
- Received **3 National Merit Certificates** in **Science**, **Maths & English** from the **CBSE** for being in the top 0.1% performers among more than 630,000 students in CBSE 2009 Board Exams

Courses

Courses in Italics will have finished by April 2014

Theoretical: Discrete Math, Data Structures, Algorithms, Formal languages and automata theory, *Theory of Computation, Probability*

Systems: Digital Design, Computer Organization and Architecture, *Operating Systems*, *Compilers* **Others**: Software Engineering, *Optimization*, *Data Communication*, *Networks*,

Online: Learning from Data (Caltech), Machine Learning (Stanford), Web Intelligence & Big Data(IITD) **Labs:** Peripherals, Databases, Compilers, Networks, System Software, Software Engineering, Systems Programming, Hardware

Positions of Responsibility and Extra Curricular Activities

- **Batch Representative** of CSE 2015 Batch
- Student Representative (Third Year) in Department Undergraduate Planning Committee
- Literary Secretary of Dihing Hostel, IIT Guwahati for the year 2012 2013
- **Head Boy** of Sanghamitra School during the academic year 2008 2009
- Core Team Member and Event Organizer of IITG Entrepreneurial Summit 2013
- Enthusiastic participant in hackathons, workshops, lectures and coding contests conducted by Coding Club and Google Developers Group, IIT Guwahati
- Hobbies include reading books, photography

References

- Dr. Vijaya Saradhi, Assistant Professor, Dept. of CSE, IIT Guwahati
- Dr. Pradip K Das, Associate Professor, Dept. of CSE, IIT Guwahati