

Rahul R Huilgol

<http://rahul003.github.io>

DoB: 3rd October 1993

Address: Room 206, Dihing Hostel, IIT Guwahati,
Guwahati, India - 781039

☎ +91 8011253353

✉ h.rahul@iitg.ernet.in
rahulhuilgol@gmail.com

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 | Sri Chaitanya Junior Kalasala [Board: BIE-AP] | Hyderabad, India |
| Score | 96.1% | 2009 – 2011 |
| Institute | Sanghamitra School [Board: CBSE] | Hyderabad, India |
| Score | 94.4% | – 2009 |

Projects

[Link to Projects on my Website](#)

| | | |
|---------|--|----------------------------|
| Title | Machine Learning using CCA on Network Traffic Data | <i>Status: Ongoing</i> |
| Guide | Dr. Vijaya Saradhi, <i>IIT Guwahati</i> | |
| Nature | Summer Research Project | |
| 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 Bangalore) gave an accuracy of over 90% and was ranked 26th in India. | |
| Title | Handwritten Digit Recognizer | Independent Project |
| 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 | 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, <i>IIT Guwahati</i> | |
| 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 | SyncBox - A file hosting and file synchronization service | |
| Guide | Dr. Pradip .K. Das, <i>IIT Guwahati</i> | |
| 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 | 2 Pass Assembler Linker Loader for 8085 | Python |
| Guide | Dr. Santosh Biswas, <i>IIT Guwahati</i> | |
| 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 | A Human v/s Computer Game | Java |
| Guide | Dr. Saswata Shannigrahi, <i>IIT Guwahati</i> | |
| 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 and more projects can be seen on my [Website](#)

Technical Skills

| | |
|------------------------------|---|
| Programming Languages | C, C++, Java, Python, UNIX Shell Scripting |
| Web Development | HTML, CSS, Javascript, PHP |
| Operating Systems | Linux, Microsoft Windows |
| Tools & IDE | Visual Studio, Eclipse, Microsoft Office, LaTeX |
| Frameworks/Libraries | Twitter Bootstrap, Scikit-learn, Weka |

Research Interests

| | | |
|---------------------------------------|-----------------------------|-----------------------|
| Machine Learning Operating Systems | Natural Language Processing | Information Retrieval |
|---------------------------------------|-----------------------------|-----------------------|

Major Academic Achievements

- **1132 (top 0.2 %)** in **IIT-JEE 2011** among *half million* participants across India
- Secured an All India Rank of **2432** (in the top **0.2%**) among 1 million participants in **AIEEE 2011**
- Stood **73** in **KCET 2011** and **310** in **EAMCET 2011**, Engineering Stream
- Secured **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*

Systems: Digital Design, Computer Organization and Architecture, *Operating Systems, Compilers*

Math: Linear Algebra, Real and Complex Analysis, Multivariable Calculus, *Probability, Optimization*

Others: Software Engineering, *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