

ASHIK RATNANI

607-319-9111

319 Highland Rd, Apt 4C, Ithaca, NY, USA-14850

anr58@cornell.edu

EDUCATION

Cornell University, College of Engineering, Ithaca, NY
Masters of Engineering in Computer Science

May 2012
GPA: **3.83/4.00**

Nirma University, Institute of Technology, Ahmedabad, India
Bachelor of Technology in Computer Science

May 2010
GPA: **8.76/10.00**

COURSEWORK AND ACADEMIC PROJECTS

Advanced Systems

Fall 2011

Cloud Based Execution Engine for MAPS and MARS:

- Developed a framework to enable the GE's MAPS and MARS, which are widely used for planning and simulating electric power grids; assessing the economic performance of large electricity markets; and evaluating generation reliability, to be easily executed in a cloud computing environment.
- This framework is scalable and robust. It provides reliable, fast computation and an interface for clients to monitor their job status.
- It was implemented in **Java** and was tested on **Amazon's EC2** and **Cornell's Red Cloud**.

Design of Unix Operating System

Fall 2009

System Call of Linux for Windows:

- Developed a C library and an automatic code generator to emulate the System Call provided by LINUX i.e. fork, pipe on Windows.
- It was implemented using WIN32 API, Context Free Grammar, **LEX**, **YACC** and automated parsing.

Data Compression and Encryption

Fall 2010

Automation & CAPTCHA Decoding:

- Developed a script to automate the reservation process of www.irctc.co.in
- The script would trigger at the time specified by the user and will keep retrying as long as the job is not done. The script is also capable of decoding the CAPTCHA image required to submit the form
- It was implemented using JavaScript, Grease Monkey, **PHP**, GD Library and histograms.

Relevant Coursework

Operating Systems, Operating Systems Practicum, Introduction to Database, Theory of Computation, Computer Networks, Basics of Artificial Intelligence, Parallel Computing, Compiler Writing

PROFESSIONAL EXPERIENCE

Infosys, Pune, India

July 2010-July 2011

Test Engineer, Finacle, an online banking product of Infosys Ltd

- Testing of Payments, Funds transfer and Trade finance modules of Finacle using firestone.
- Responsibilities include Test planning, Testing and Domain knowledge transfer to the new members.
- Worked in a Team of **40+ Employees** and mentored 2 newly joined test engineers.

Infosys, Mysore, India

Spring 2010

Intern, Education & Research Department

- Implemented a Compiler for C with support for new Data types: Dynamics Arrays, Stack, Queue, Hash using **Perl**, **Yapp** (Yet another Perl Parser compiler), Context Free Grammar, Scanner generation and Parser generation.
 - Responsibilities include implementation of the Data structures module and integration of modules.
-

TECHNICAL SKILLS

Languages : C, C++, Perl, SQL, PL SQL, Java, Python, PROLOG, Pascal

Web Technologies : JavaScript, PHP, HTML, ASP, WML

Framework and Tools : Oracle, LEX, YACC, Yapp, Wireshark, Rational Rose CASE Tools

ACADEMIC HONORS

- Received a **Scholarship** of 32612 USD from Aga Khan Foundation for study at Cornell University.
 - Awarded **Best Performer** among 700 interns by Infosys.
 - C coding Competition, Nirma University (2nd Place).
-

RESEARCH EXPERIENCE

Multi Processors, Advanced Systems, Cornell University

Fall 2011

Gave a presentation on the design of DISCO, a Virtual Machine Monitor and Tornado, a Scalable SMMP Operating system.

EXTRACURRICULAR

- Author of the blog www.hungry-hackers.com which is ranked 75 among Indian blogs by indiblogger.com, has a Google Page Rank of 4 and gets 200000+ viewers/month.