Venkata Dinesh Kota | **120050051**
Computer Science & Engineering | **B.Tech.**
Indian Institute of Technology Bombay | **Male**
DOB: 28-7-1994

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2016	6.99
Intermediate/+2	Board of Intermediate Education	Narayana Junior College	2012	94.50
Matriculation	SSC , AP Board	SPR School	2010	90.67

SCHOLASTIC ACHIEVEMENTS

- Secured All India rank **243** in **IIT-JEE** out of 5,00,000 students [*2012*]
- Secured All India rank **16** in **ISAT** [*2012*]
- Was awarded **NTSE** scholarship [*2008*]
- Secured AIR **6** in **SIMO**,AIR **7** in **AMTI** Mathematics Olympiad and State **2nd** in **APAMT** [*2007*]
- Secured State **3rd** in Unified Council [*2008*]
- Secured **99.69** and **99.75** percentile in **Unified Council IMO** in consecutive years [*2008,2009*]

INTERNSHIP AND RESEARCH EXPERIENCE

SMARTRON – Remote Rendering Pipeline for Android [*Summer 2015*]

Guide: Adnaan Badr, Sr. Software Engineer, Smartron

- Worked on **APITrace**, an open source project, which is used to capture the frames which are being displayed and make a trace file out of it. The trace file created contains several frames, these frames are filled with EGL calls. This trace file data streamed over network and can be replayed on phone using **Retracer** app
- The basic idea behind the project is to **remotely display** the contents of the Smartphone on to another basic display, thus the Smartphone can be ripped of its display and use any display to view and Interact with the phone
- Started with System level Tracing and worked on the Source code to make it run on specific Android API level(API 19),version 4.4.2 and Ported it to work on Android version 5.0

R&D Project: Mic App [*ongoing*]

Guide: Prof Bhaskaran Raman

- Developing an Android App which is used by students and professor as a means of communication.
- The app streams what is being said by the students to professor's smart phone, so that he/she can play through his/her mike

Undergraduate Dissertation: Vulnerabilities in Web Security [*ongoing*]

Guide: Prof Bernard Menezes

- Understanding the working of different attacks that are possible on Web Applications such as XSS, HTML Injection, SQL Injection, CSRF, Clickjacking by exploring them in WAVDP
- Planning to implement a Google Chrome Extension to prevent various attacks such as Attribute Injection, Clickjacking attacks and XSS vulnerabilities

ACADEMIC PROJECTS

Food Ordering System [*autumn 2014*]

Guide: Prof. Nandlal L.Sarda

- Designed and developed a **Web portal** for managing online orders.
- Implemented entities such as Users, Sellers, Orders in **JAVA** and modelled them using **E-R diagram**
- Deployed this using Apache Tomcat server with **PostgreSQL** as back-end and **JSP** as front-end

Simple HTTP Server [*autumn 2014*]

Guide: Prof Varsha Apte

- Implemented a **HTTP server** which functions according to the standard HTTP protocol using socket programing in **java** which loads HTML file into a standard browser
- Implemented **HTTP1.1 features** like persistent connections , Keepalive timeout, queuing server, mutli-threaded server

OS Simulator [*spring 2015*]

Guide: Prof. Dhananjay M.Dhamdhere

- Implemented different **thread scheduling** algorithms like round robin with time-slice, multilevel scheduling and kernel and user level threads in Geek OS
- Implemented an algorithm to **detect deadlocks** when many processes are requesting for resources

Compilers Project [*spring 2015*]

Guide: Prof Amitabha Sanyal

- Designed a compiler for C-style programming language which detects syntactic and semantic errors and outputs an assembly file which uses minimum number of registers for arithmetic expressions
- The lexical analyzer was implemented using **flex** and the parser was implemented using **Bison**

Steam Locomotive Simulation Using Box2D [*spring 2014*]

Guide: Prof Parag Chaudhuri

- Simulated a working Steam Locomotive in C++ using **Box2D**, a physics simulation library

Sudoku Puzzle Game [*spring 2013*]

Guide: Prof Amitabha Sanyal

- Implemented Sudoku game where random puzzles are generated for solving, using **PLT Scheme**
- Implemented a verifier for correctness of partially solved Sudoku and a solver for solving a Sudoku

Project PACMAN [*autumn 2012*]

Guide: Prof Abhiram Ranade

- Recreated the classical game Pacman in **Simplecpp** (a C++ based package developed by IITB)
- Implemented the logic for different motions and decision making of ghosts for chasing the pacman

KEY COURSES UNDERTAKEN

Algorithms and Data Structures, Automata theory , Computer Architecture, Operating Systems, Computer Networks, Artificial Intelligence, Databases, Compilers, Network Security and Cryptography

POSITION OF RESPONSIBILTIES

- Department Sports Secretary, CSEA Council [*2013-14*]
- Department Joint Secretary, CSEA Council [*2014-15*]
- Department Mentor, CSE DAMP [*2014-15,2015-16*]
- Department General Secretary, CSEA Council [*2015-16*]

INTERESTS AND EXTRA-CURRICULAR ACTIVITES

- Part of hostel 3 drama team , placed first in freshizza(a first-year students hostel dance competition)
- Represented Hostel 7 in Kho-Kho GC and were placed 3rd in 2013-14 and 2nd in 2014-15
- Regularly play basketball and Table Tennis