#### **ANKIT VADEHRA**

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#### **OBJECTIVE:**

I am seeking a challenging and interesting position in which I can use my fast learning skills to gain professional experience in order to further my technical abilities and communication skills.

# RESEARCH//FIELD INTERESTS:

Machine Learning\*, Front/Back-End Design, Data Structures, Algorithm Design. \*Currently Learning

#### **EDUCATION:**

Vellore Institute of Technology, Vellore

Bachelor of Technology, Computer Science and Engineering

Current GPA: 8.26/10

Cumulative Grade Point Average: 7.96/10

\*Currently Pursuing 4th Semester

Delhi Public School, Mathura Road

Senior School, Senior School Certificate Examination(SSCE)

Aggregate Score: 83.8% (419/500)

Delhi Public School, Mathura Road

High School, Secondary School Examination(SSE)

Aggregate GPA: 9.17 (55/60)

Vellore, Tamil Nadu July 2012-Present

> New Delhi, India March 2012

> New Delhi, India March 2010

## **ACADEMIC EXPERIENCE:**

Teacher Assistant for the Subject CSE-220 (Object Oriented Programming and Paradigm)

# PROJECTS UNDERTAKEN:

## Developed a Virtual Tarot (.. based on Peter's Answer)

- · Program Takes in a Petition Statement(and the answer, at the same time)
- · Program asks for a question, and answers it correctly.
- · Developed in C++.

#### Sieve of Eratosthenes:

(Under Project Based-Evaluation University-Curriculum, Chosen as 1 of the top 2 projects in class )

- Made a paper comparing the sieve of Eratosthenes vs the traditional 2-For-Loop technique, and computed that the Sieve is beneficial for values greater than ~10,000.
- Applied the Sieve to Different Data Structures, namely Basic array, Stacks, Linked List and a Binary Search Tree and graphically computed the time taken to Traverse the Data Structure Find Primes and then printing it, for different Data Structures.
- · Language: C++

The Batman and Joker(.. a Graph Theory game, mod. Of Pursuit of Invasion//Cops and Robbers)
(Under Project-Based-Evaluation University Curriculum, Chosen as 1 of the projects of final Display)

- The game uses graph theory to print a matrix for the designed nodes-graph(unweighted).
- The start has a character **B(The Batman)** and the runner **J(The Joker)**, the maze contains various hurdles(buildings/dead wall), +-points(helicopters, shooter, teleporter)
- · The objective is for **B** to reach **J**.
- · Language: C++

#### Sorting Techniques(comparison)

(Under the School-Project Curriculum)

- Applied the different sorting techniques on an array[], and calculated the base-sorting time taken by the program, for various input values -(n).
- Designed a Graph for how the time taken increases/decreases and submitted to the Faculty In-charge.
- Language: C++

## Developing an Operating System(UNIX) based on PintOS\*.

Working on the framework to develop various features like FileSystem, Threads et cetra.

# Impact of SMS-Language on the Youth Today

(Under English-Project-Course-Evaluation)

- · Did a survey using Google-Docs, based on a pre-made questionnaire.
- · 260-students took part in the survey, which resulted in a detailed observation and findings of the impact of using shorthand-SMS-lingo on a daily basis.
- · Submitted the paper and presentation which was selected and later published in Newsletter.

#### \*-Currently On-Going

## **TECHNICAL SKILLS:**

- Programming Language: C++, C, HTML, CSS, SQL, Python\*, Javascript\*
- Tools: Latex\*, Vim\*, Emacs/Sublime Text.
- · CMS: Wordpress, Tumblr, Drupal
- · Operating System: Linux, Microsoft Windows.

#### **RELEVANT COURSES:**

- · Computer Systems: Computer Architecture, Microprocessor ad Interfacing\*, Operating System\*
- Hardware Design: Digital Hardware Design Lab(ALTAIR), Electronics Circuit Lab-1/2, Digital Electronics Lab-1/2
- Computer Science and Maths: Data Structures and Algorithm Design, Linear Algebra, Numerical Analysis, Object Oriented Programming, Theory of Computation\*, Algorithm Design and Analysis\*, Applied Probability and Statistics\*

# **EXTRACURRICULAR ACTIVITIES:**

#### Web Development:

- Developed a Website for the school's MUN-fest(defunct.) can be found at: (http://mungsmun.site90.com/)
- Developed and managed a website for the school's Computer Club WarP.(defunct.) can be found at: (http://warpsquad.comuf.com/)
- $\cdot$  Working on Websockets and using site APIs to integrate content and present it in a unified location.

# **Voluntary Work:**

- Fifth Pillar: Went to a neighborhood village, to interact with children and helped to donate them free books and stationary.
- · Part of a Blood Donating Drive, organized with help of the Christian Medical College, Vellore and VIT Health Club.

# College:

- Selected as a core member of the Technical Group of student chapter IEI-VIT(Institutions of Engineers, India), on the team I helped in making Poster's for different events and symposiums, as well as videos for the events. I also helped in making and handling the chapter website.
- Currently on the team handling and organizing the Conference ADEICON 2014, which is an Advanced Engineering International Joint Conference, an inspiring event that looks over the horizon at which technological innovation is going and how the students can benefit from that.
- · Under the college fest VIT Gravitas, helped in organising an event,"IAS Prototype" in which we invited IAS 2009 Mr. Shah Faesal and IAS 1983 Mr. Kalyan Sundram, to educate the students on the

<sup>\*</sup>Not Proficient, currently learning.

<sup>\*</sup>To be done in the present semester.

IAS exam details pattern and ways to successfully clear it. Also, a mock IAS paper was organised for the students.

# High School(DPS Mathura Road):

- During School, i was the Member, then got promoted to Executed, then Director and finally was made the President of the Schools(DPS Mathura Road) Computer Club, WarP.
- Over the years i participated in various inter/intra school Computer-Symposiums and have won accolades in various fields from Multimedia to Graphic Design to Programming and Web Development.
- · I was the Technical Head for the School's MUN and Eco-Fest in 2012.
- Due to my extra-curricular excellence, i won the Co-Curricular Excellence badge for 3 years in a row, and finally the School-Co-Curricular-Excellence Blazer.

## **DECLARATION:**

I hereby declare that the information provided in this document is true to the best of my knowledge and belief.