4th Year B.E Student
Computer Science and Engineering
Rashtreeya Vidyalaya College of Engineering,
Bangalore-560059.

KARTIK K.R

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Objective

To pursue a challenging career and be part of a progressive organization that gives scope to enhance my knowledge, skills and to reach the pinnacle in the computing and research field with sheer determination, dedication and hard work.

Academic Details

Year	Degree	Institute	Percentage/CGPA
2013-Present	B.E in Computer Science and Engineering	Rashtreeya Vidyalaya College of Engineering(RVCE)	CGPA = 9.22/10
2013	Class XII CBSE	Venkat International Public School, Bangalore	92% 98 in Mathematics
2011	Class X CBSE	Venkat International Public School, Bangalore	CGPA = 10/10

Work Experience

SOFTWARE DEVELOPMENT INTERN   **MICROSOFT IDC, Bangalore**   **MAY 2016- JULY 2016**

- Developed a Machine learning model for prediction of ideal assignment candidate based on previous history of cases
- Architecture and implementation of pipeline to use the CRM data and Azure ML for prediction.
- Automatic routing/assignment of case based on the case details.

SOFTWARE DEVELOPMENT INTERN   **INTUGINE TECHNOLOGIES**   **MAY 2015-JULY 2015**

- Developed algorithm to recognize gestures and Integrated applications with the Nimble (ring with IR emitter) using OpenCV and C++.
- Worked on optimizing CPU utilization, created static library, application programming interface (API) development and created a software development kit (SDK) of source code.
- The algorithm developed is being implemented at Intugine currently.

Projects

Cryptographic algorithm acceleration using CUDA enabled GPU'S: **AUG 2014 – JAN 2015**

- Implemented AES encryption algorithm (advanced encryption standard) used in data security and networking on CUDA a general purpose parallel computing platform and parallel programming model created by NVIDIA.
- The processing time using CUDA were found to be exponentially lesser than that of CPU code.

Hand based gesture recognition system: **APRIL 2015 – JULY 2015**

- Coded a simple fast algorithm to detect hand movement with the help of computer vision libraries and image processing using polygon detection technique.
- Identified basic Gestures and simulated it with specific functions.

RTO Management System: **SEPT 2015 – NOV 2015**

- Created a web application for the user point of view of a RTO management system where the user can update his owned vehicles, file applications off LL and DL and also check for violations.
- Provide an easy and simple way to pay the penalties online through the portal and maintain the concerned data.

Simulate a one pass assembler for SIC/XE using Lex and Yacc: **JAN 2016 - APRIL 2016**

- Designed a single pass assembler for a SIC/XE program using Lex file to generate tokens and Yacc to identify the grammatical structure of the program.
- It provides an efficient way to identify any errors in the code and also generate the object program for machine level instructions.

Publications

- ***Comparative Study of Computationally Intensive Algorithms on CPU and GPU***.
  International Journal of Applied Engineering Research ISSN 0973-4562 Volume 11, Number 5 (2016)

Achievements and Awards

- Recipient of the Cisco Best project award on the topic "Cryptographic algorithm acceleration using CUDA enabled GPU's" among over 200 projects.
- Placed **16th** in university of Pittsburgh replay coding contest hosted on Codechef competing with over 3000 teams.
- Ranked in top 500 across the world (**1st** in college) on Codechef –handle (kartik_kr).
- Secured **1st** position at Microsoft codehunt organized by BMS phase-shift among over 100 participants. Secured **2nd** position in inter-college programming contest conducted during 8th mile- annual technical fest of RVCE.
- Secured **2nd** position in inter-college programming contest codejam held at BMS College of engineering.
- Secured 10/10 CGPA in class 10 exams certificate of appreciation by Sahodaya group of institutions. 96% in PCM in class 12, being one of the toppers in the college.

Courses Studied:

Computer Science: Parallel Programming , Operating Systems, Theory Of Computation, Analysis and Design of Algorithms, Programming Languages(C,C++),object oriented programming, Computer Architecture, Discrete Mathematical Structures, Database system, Data Structures, Digital logic and design, microprocessors, advanced algorithms, compiler design, computer networks, Game theory .
Mathematics: Graph Theory, Probability Theory, Discrete mathematical structures, Linear Algebra, Matrix Theory, Fuzzy logic.
Programming Languages: C++, C, Python, HTML CSS, and javascript.
Software packages: OpenCV, visual studio, MySQL, eclipse, scikit learn, azure ML.
Platforms: Linux and Windows.

Extra-Curricular activities:

- Actively participate in Online Programming Contests with the following achievements:
  - Ranked in top 500 across the world on Codechef, Hackerrank and Hackerearth.
  - Blue coder on Codeforces with a rating of 1406.
  - Badge 3 holder in Hackerrank and an active problem setter of college programming contests.
- Actively take part in football, table tennis, Sudoku challenges and cricket.