**VINAY KUMAR**

**PG Specialization: Computer Science Engineering**

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**Examination University Institute Completion Year CPI / %**

M.Tech Shivaji Univ. Walchand College of Engineering, Sangli 2016 7.56

B.Tech (CSE) MDU, Rohtak KIIT College of Engineering, Gurgaon 2012 70.20

Intermediate/+2 C.B.S.E Kendriya Vidyalaya No.1 Delhi Cantt 2008 75.00

Matriculation C.B.S.E Kendriya Vidyalaya AFS. Jorhat. 2006 83.00

# INDUSTRIAL EXPERIENCE

**Globant Technologies, Pune:** [July 2015 – Present]

**Delhi Transo Ltd. (Development Program** at DTL, Delhi (ND))

**Team Size** **:** 15 Members [June 2010 – Aug 2010]

**Tenure** **:**  6 Weeks

**Description :** Training On “**Introduction to JAVA: SQL**” **Designation :** Software Trainee

**Responsibility:**

* Assist the plant manager with the development of operative strategies
* Scheduling and controlling of production processes and preparing production documents.
* Handling plant records.
* Trained 5 trainees

**Equipment’s handled:**

* Power transformers, shunt reactors, circuit breaker, current transformers, capacitive voltage transformers, surge arresters etc.

# AREA OF INTEREST

* **High Performance Computing**
* Algorithms, Data Structures, Operating Systems and Mathematics.

# SOFTWARE ENGINEERING EXPERTISE

* **Programming Languages :** C, C++, Java, C#
* **Scripting Languages :** CSS3, JavaScript, AngularJs, BootStrap, FlexBox, PHP
* **Parallel Programming:** OpenMP, OpenMPI, pthreads
* **Database :** Oracle 11g, Hadoop (on Single node)
* **Operating System :** Linux (Ubuntu 14.04), Windows 8.1
* **Versioning Tools :** GitHub
* **Profilers** : Gprof, perf

# ACADEMIC PROJECTS

**Post-Graduation Seminar II: “High Level Strategies for Parallel Shared Memory Sparse Matrix Vector Multiplication”** under the guidance of **Prof. M.A Saha**  (Jan’15- present)

**Details:**

* The sparse matrix-vector multiplication is an important computational kernel, but is hard to efficiently execute even in the sequential case.
* The problems—namely low arithmetic intensity, inefficient cache use, and limited memory bandwidth
* One of the newly proposed methods attains the best average result in experiments on a large set of matrices. In one of the experiments it obtains a parallel efficiency of 90 percent, while on average it performs close to 60 percent.

**Post-Graduation Seminar I: “Cool” Load Balancing for High Performance Computing Data Centres** under the guidance of **Prof. M.A Saha**  (Sept’14 – Dec’ 14)

**Details:**

* In exascale machines, both peak power demand and total energy consumption have become prominent challenges.
* Proposed is a scheme based on a combination of limiting processor temperatures using dynamic voltage and frequency scaling (DVFS) and frequency-aware load balancing that reduces cooling energy consumption and prevents hot spot formation.
* Show cooling energy savings of up to 63 percent, with a timing penalty of only 2-23 percent.

**Graduation Project: “Active City Administration (ACA) – An IBM TGMC 2012 Contest”**

**Name** **: Active City Administration**

**Role :** Analysisand Coding

**Database**  **:** IBM’s DB2 Express-C

**Front End** **:** JSP (with HTML, CSS and JavaScript)

**Team Member**  **:** 3 Members

**Description :**

* An user-friendly online interface for citizens to communicate with administrative body and to reduce the distance and time barrier between citizens and administration.
* Here people can share ideas, invoke discussions, issue complaints, and create suggestion/petitions for improvement of city administration.
* Also encourages the citizens to actively participate in city administration to bring transparency and flexibility in system.

**Course project: “Well Meadows Hospital Management System (WMHMS)”**

**Role :** Designing,Analysisand Coding

**Database**  **:** Oracle 11g

**Front End** **:** .Net (with HTML and CSS3)

**Description :**

* It describes a small hospital specializes in the provision of health care for elderly people.
* Features is a description of the data recorded, maintained, and accessed by the hospital staffto support the management and day-to-day operations.

# EXTRA -CURRICULAR ACTIVITIES AND AWARDS

* Valid **GATE 2014 Score of 475**
* Active Member of **HackerRank.com** having **HackOs 456** and **HackerEarth.com**.
* **Hosting website**: [www.gatehelpline.com](http://www.gatehelpline.com/) – A free question answer portal for GATE Aspirants.
* Earlier Websites: [www.dabanggengineers.com](http://www.dabanggengineers.com/) – An Engineers Portal.
* Attended Seminar **“Algorithmic Game Theory”** from MAX Plank Society, Germany Ministry for Education & Research during Dec 8 – 12, 2014.
* Attended Coursera’s course on – “**Introduction to Heterogeneous Parallel Computing**” by Prof. Dr. Wen-mei Hwu – University of Illinois at Urbana Champaign.
* Attended a 2 day program on **“Hadoop – Big Data”,** at WCE Sangli
* Made Changes in the Linux (Ubuntu 14.04) kernel and successfully compiled and run the OS.
* Active member at **CodeAcademy.com :** <https://www.codecademy.com/vinaykrprajapat>.
  + Javascript Skill Completed
* Active member at **CodeSchool.com :** <https://www.codeschool.com/users/1677537>
  + **Git Skill** through **Git Bash** Completed **:** <https://github.com/vinaykrprajapat>

# PERSONAL PROFILE

**Date of Birth** **:** 17th December, 1990

**Father’s name** **:** Rajender Singh

**Gender**  **:** Male

**Marital Status** **:** Single

**Languages Known** **:** English and Hindi

**Nationality :** Indian

**Strengths :** Leadership skills, Self-confidence, possess sound time management, People relationship, communication skills and Strong team player.

**Other Interests :** Travel, Music, Playing Cricket, Football.