

## Showvick Kalra

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### Education

**University of Southern California**, Los Angeles, CA (2007-2009)                      GPA **3.72/4**  
Master of Science Computer Science

**National Institute of Technology**, Trichy, India (2002- 2006)                      GPA **8.2/10**  
(Formerly Regional Engineering College)  
Bachelor of Technology Computer Science

### Work Experience

Associate Software Engineer (June 2006-June 2007)

AIX (IBM's Unix) Base OS Development

**Systems and Technology Group, IBM Bangalore, India**

### Academic projects

- Performed **Lexical Analysis, Syntax Analysis, Semantic Analysis** and **Memory Allocation** on Declaration statement, Assignment statement, if else statements and Switch statement using C
- Designed a **Calculator** using 8085 Microprocessor
- Implemented a **Text Editor** using C
- Performed **Simulated Annealing** on N-queens problem
- Implementation of **Label Distribution Protocol (LDP)** in a Multi Protocol label Switching (MPLS) architecture (RFC 3031)

### Professional Projects

- **Probevue** Dynamic Tracing Utility :- Syntax of the command that I developed.  
probevue [ **-c** "{ timestamp = { 0 | 1 } thread = { on | off } tid = { t1, ... } pid = { p1, ... } }" ] [ **-I** *Include\_file1*, ... ] [ **-s** *Buffer\_size* ] [ **-o** *Output\_file* ] [ **-t** *Interval* ] [ **-X** *Program\_name* [ **-A** "*Arguments\_to\_program*" ] ] [ *Script\_name* [ *Arguments\_to\_script* ] ]
- Command support for **Shared Pool Usage of Dedicated Capacity** :- Updated performance commands lparstat, mpstat, iostat, vmstat by adding new flags to support donation of unused capacity to shared processors
- Performance metric classification for **Workload Partitions (WPAR)**
- **Porting** a 32 bit library (libIN) to 64 bit
- **Non zero display** for iostat (input output statistics) :- A new flag to display non-zero statistics was introduced. This flag can be used with the displays of disks, queues, file systems, path statistics, adapters and tapes.
- Function verification testing for **Scaled Performance Utilization Resource Register (SPURR)** support for commands.
- 64 bit **Inode** support for grep,devnm and dd commands
- Command support for **Asynchronous I/O Dynamic tuning** of iostat command

### Computer skills

**Languages** C, C++, Java, Perl, SQL

**Operating Systems** Windows, AIX, Linux

**Tools** DBX, CMVC, TET, KDB, Beam, Rational Purify, Rational Clearcase

### Extra curricular

- **Programming Chair, University Residential Student Council**, University of Southern California 2007-2008
- **Director, Rotaract Club** of NIT Trichy 2005-2006. (Rotaract is a program of Rotary International and it takes the name from the combination of the words Rotary and Action)
- Held the position of **Prefect** in Our Own English High School in the year 2001-2002
- Intermediate level in **Funk Jazz** at Shiamak Davar Institute of Performing Arts (SDIPA)
- **Chairman of Organization Committee** for Vortex 2006 (A National level technical symposium by the department of computer science NIT Trichy)