# **Sravan Bagalkote**

# Resume

395, Old Boys Hostel (OBH), email: <a href="mailto:sravanbagalkote@gmail.com">sravanbagalkote@gmail.com</a>

International Institute of Information Technology, website: web.iiit.ac.in/~sravan.bagalkote

Gachibowli , Hyderabad – 500032 phone: +91-9550447921

#### **Education:**

• June 1995 to March 1997: Kindergarten at Little Angels School, Surat, Gujarat.

- June 1997 to March 2004: St. Thomas High School, Dilsukhnagar, Hyderabad.
  - Secured 84% in Standard VII Board Examinations.
- June 2004 to March 2007: Sanskar Vidya Bhavan, Bharuch, Gujarat.
  - Secured 95.2% in Standard X Board Examinations.
- July 2007 to April 2009: Intermediate at <u>Narayana Junior College, Kothapet, Hyderabad</u>.
  - Overall 975/1000 for 2 years (97.5%)
- July 2009 to present: B Tech, Computer Science and Engineering, <u>International Institute of Information Technology</u>, <u>Hyderabad</u>.
  - Pursuing Undergraduate Honors in <u>Security, Theory and Algorithms Lab</u> under Dr. <u>Kishore Kothapalli</u>, Associate Professor, IIIT-H.
  - Currently in 6<sup>th</sup> semester, CGPA: **7.92** (at the end of 5 semesters).

## **Research Interests:**

• Parallel Algorithms, GPU Programming.

#### **Achievements:**

- Awarded **Student of the Year** for the academic year 2005-06.
- District Topper in CBSE X Board Examination.
- **CIPEL** Gold Medal for English and General Knowledge in the Year 2006.
- **CIPEL** Gold Medal for Mathematics in the Year 2007.
- Received Amul Vidya Shree Award in the year 2007.
- All India Rank of 2223 in **AIEEE 2009** Examination.
- All India Rank 4880 in **IIT-JEE 2009** Examination.
- Finalist in **NSEF** Social Entrepreneurship Program 2012.

# Research and Work Experience:

• Efficient Sparse Matrix – Matrix Multiplication on GPU using CUDA C. (Monsoon 2011):

Currently implementing and analysing parallel and efficient way of Sparse Matrix – Matrix Multiplication on GPU using different optimizations and three different algorithms. ( using CUDA)

Project Guide: Dr. Kishore Kothapalli, Asst. Professor, IIIT-H

• *Multi Tenant Order(SaaS) Management* (Monsoon 2011): Currently working on this project which focuses on Inventory and Order Management. This project is being implemented using various cloud technologies and NoSQL Databases. Vendors put-forth

their product list and the customers shall query upon their choice of products. Some of the technologies that are being used to implement this project are MongoDB, MemCache, Amazon EC2/

Project Guide: Dr . Vasudeva Varma , Associate Professor , IIIT-H

• *IIIT-H Media Portal* (Monsoon 2010): Built a Media Portal for our college for the Outreach department.

Technical Project Guide: Vikram Pudi, Professor, IIIT-H.

• BTP: Implementation of 3D Convex Hull on hybrid environment.

Project Guide: Dr. Kishore Kothapalli, Asst. Professor, IIIT-H

- Teaching Assitant Humanities: Monsoon 2011
- Teaching Assistant Computer System Organization: Spring 2012

## **Minor Projects:**

- **Linux shell:** Designed a basic Linux shell for running all type of commands with piping and redirection functionality, in C using system calls.
- **Proxy Web server:** Designed a proxy web server with cache functionality which serves HTTP requests from multiple clients. (using Java)
- Basic Image Processing Algorithm: Implemented algorithms like template matching, edge detection, image compression .(using Matlab)
- **Music Library:**Built an on-line music library (using web2py framework).
- **BASIC language Interpreter**: Was part of a team which implemented an interpreter for BASIC language .(using C)
- **Graphic API Libraries:** I developed the complete graphics pipeline from modelling, viewing, projection and view-port clipping.
- Torrent Client: Currently developing a c++ library on torrent client for android.

### **Relevant Coursework:**

### On-going (Spring 2012):

• Software Engineering, Principles of Information Security, Quantum Mechanics, Dharma polity and constitution of India.

### Completed:

- Artificial Intelligence, Graphics, Computer Networks, Algorithms, Operating Systems, Introduction to Databases, Formal Methods, Engineering Systems.
- Data Structures, Computer System Organization,IT Workshop I and II (Bash, HTML, web2py, Python GTK).Computer Programming, Mathematics (Combinatorics, Probability, Complex Numbers, Graph Theory, Linear Algebra).
- Complexity and Advance Algorithms, Compilers, Disaster Management, Cloud Computing, Numerical Analysis.

#### Future:

• Database Systems (Spring 2013), Corporate Strategy (Monsoon 2012).

### **Technical Skills:**

Programming/Scripting Languages	C,C++, Java,CUDA C, Python
Web development	web2py, HTML, CSS, Jquery, Swing(GUI), VAADIN(UI)
Operating Systems	Windows(XP, 7), Linux(Ubuntu, Fedora, SUSE).
Libraries	OpenGL, OpenCL (Basic), OpenMP(Basic).
Programming environment	Eclipse, Vim,NetBeans.
Architectures	Hadoop , CUDA
Miscellaneous	MySQL, NoSQL, MATLAB,NDK Octave,Photoshop,DreamWeaver

### Co-curricular and other activities:

- Currently part of the technical and design development team for various events like on-line events of Felicity 2012 (Technical and Cultural Festival of IIIT-H).
- Member of ASHAKIRAN , a school run by IIIT-H students for kids who come from nearby slums.
- I am interested in designing stuff in photoshop.
- Core member of Entrepreneurship-Cell in IIIT-Hyderabad.
- Member of Computer Society of India (CSI) in IIIT-Hyderabad.