# **Dinesh Kumar Challa**

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## **O**BJECTIVE

Seeking a Full-Time position in the field of Computer and Information Sciences which would enhance my technical expertise and contribute towards the growth of the organization.

## **EDUCATION**

Master of Science in Computing and Information Sciences, Kansas State University, Manhattan, Kansas, USA Aug '07 – Dec '09, GPA 3.72/4.0

**Bachelor of Technology in Computer Science and Information Technology,** JNTU, Hyderabad, India Aug '03 – Apr '07, **GPA 3.9/4.0** 

# SKILLS

**Programming &** 

Scripting Languages : C/C++, Java, Perl, Shell, TCP/IP, Socket, MPI Programming, nesC, C#.

Operating systems : Linux/Unix, Windows 98/2000/XP, MS-DOS, Tiny OS, Brick OS. Web-Oriented : PHP, JSP, Perl-CGI, Java Script, HTML, CSS, JDBC, Dreamweaver.

Database Management : Oracle, MySQL, SQL Server.

Software Designing & Tools : UML, Objected Oriented Design Patterns, TOSSIM, USE, Eclipse.

Other Technologies & Editors : XML, Cluster and Grid Computing, VI Editor, Knowledge of Linux Kernel.

Graphics & Multimedia : Adobe Photoshop, 3D MAX

# RELATED COURSEWORK

Advance Computer Networks, Top/Distributed Systems, Advance Operating Systems, Real time embedded Systems, Software Engineering, Software Specification, Wireless Sensor networks Implementation, Analysis/Algorithms and Ms Thesis.

# WORK EXPERIENCE

Computing and Information Sciences, Kansas State University, Manhattan, KS.

### **Graduate Research Assistant:**

Sensor and Wireless Networks:

Jan '08 – Apr '10

- Developed Embedded Wireless applications on Handheld Mobile Devices (iPAQ), Crossbow's TelosB motes, Stargate.
- Developed Simulator for wireless applications using Java.
- Developed several GUIs for sensor wireless applications using Java and C++.

Cyber Physical Networks and Robotics:

Jan '08 – Apr '10

- Designed and developed Cyber Physical network applications in embedded environment.
- Developed different GUIs in Java, C++ for controlling, monitoring Robots.
- Developed GUIs in Java and websites (PHP, JSP) for the use of Cyber Physical network applications.
- Designed and developed architecture for automating a car on a highway without human interference in driving.

### **Bio Informatics:**

Aug '07 – Dec '07

- Developed Bio Informatics algorithms.
- Developed different Bio Informatics software and websites using Perl scripting, Java, JSP and MySql.

### **Graduate Teaching Assistant:**

Jan '08 - Dec '09

• Responsible for taking some lectures and grading Real Time Operating Systems and Computer Networks.

# WORK EXPERIENCE (cont)

### Pc clinic, Hyderabad, India

<u>Customer Support Engineer and Web Development:</u>

May '04 – July '07

- Developing Web sites using HTML, CSS, JSP, PHP, PERL-CGI, MySql, XML and Oracle.
- Worked as Junior Software Engineer.
- Maintaining websites and databases.
- Responsible for hardware assembling and troubleshooting, software loading, debugging and troubleshooting, operating systems (Windows/Unix/Linux) LAN and network management.

# **PROJECTS**

### MS Thesis: Vehicle- Highway Automation and Intelligent Highway System, Kansas State University

- Developed a research project for automating highways which involves intelligent highway system, vehicle
  automation, collision avoidance system, intelligent vehicle control system, route guidance, highway information
  system, vehicle tracking, traffic surveillance, probe vehicles, decision support system, image processing,
  intelligent wireless sensor network.
- C/C++, nesC, Java, Embedded C, MySql, Perl, XML were used to develop.

### Training using Back Propagation Networks for Defense Research and Development Organization (DRDO), India

- Worked on a research project related to Artificial Neural Networks (ANN) which deals with devising a new
  method to parallelize the Back Propagation Algorithm (BPN). The method involves developing master-slave
  architecture to perform parallel operations on a group of computers. This method has proved efficient in
  reducing the total time taken for computations and has also shown more accuracy when tested with huge data
  sets. (Accepted in IEEE).
- Linux, C/C++, Socket, TCP/IP and MPI Programming, Cluster Computing was used to develop.

### GUI used for Controlling and Simulating Robots for CIS, Kansas State University

• Using *Java* developed GUI by which robot can be controlled simulated & display values of the sensor and image.

### Hyderabad Map for Yash Technologies, India

• Used *PHP*, *JSP*, *Perl-CGI*, *and MySql* to design a prototype website using a Hyderabad city map with path tracing algorithm. This enabled direction search from one point to another using various graphical mapping techniques.

### ISA Websites for Indian Students Association at Kansas State University, Manhattan, Kansas.

• Website manages all the members' activities, information, forum and their events using JSP, MySOL, HTML, CSS.

# AWARDS, ACHIEVEMENTS & ACTIVITIES

- First prize consecutively for three years in C programming contest held at CVRCE, India.
- **Secretary** of the Indian Student Association at Kansas State University. Responsible for successful execution of events.