

# PRAHLAD KILAMBI

616, 10<sup>th</sup> Ave. S.E., Apt. 302, Minneapolis, MN 55414. Ph: 763-3602593

[prahlad@cs.umn.edu](mailto:prahlad@cs.umn.edu)

## Objective

To obtain a challenging full-time position in the field of Computer Science

## Educational Profile

Fall 2004-Present

**Pursuing a Masters Degree in Computer Science at the University of Minnesota – Current GPA – 3.8; Expected Graduation May 2006**

August 2000-June 2004

**Sri Venkateswara College of Engineering, University of Madras**

- **Bachelor of Technology in Information Technology** –  
Graduation Date 05/2004.
- Ranked in the Top 4% of the department , (equivalent GPA 3.9/4)

## Selected Course Work

Graduate

Computer Graphics I & II, Image Processing, Pattern Recognition, Advanced Algorithms, Advanced Computational Vision, Advanced Signal Processing, Computational aspects of Matrix Theory, Advanced Internet Programming

Undergraduate

Data Structures & Algorithms, Databases, Operating Systems Lab, Computer Architecture, Computer Networks, Wireless Communication, Computer Architecture, Probability and Stochastic Processes, Artificial Intelligence.

---

## Research & Work Experience

Current

**Fall 2005 - Research Assistant – AI, Robotics & Vision Lab, University of Minnesota, Advisor - Dr. Nikos Papanikolopolous**

Working on vision-based methods for tracking, monitoring and counting crowded scenes of people. The focus of this work involves building a system which accurately estimates the size of large groups as well as tracks them throughout the scene. There is also an interest in detecting crowd activities.

Past

**Summer 2005 – Intern, Mayo Clinic, Rochester, MN**

Worked as a software development engineer in the imaging unit developing a medical image viewer. The main focus of this work was to implement standard imaging algorithm. I also worked on designing the GUI, setting up the back-end as well as testing the software.

**Spring 2005 Graduate Assistant – Magrath Library, Univ. of Minnesota**

Working on projects in the field of Bioinformatics and medical imaging. Build Tutorials and conduct workshops on weblogs and Movable Type.

**Fall 2004 - Teaching Assistant –Department of Computer Science, Univ. of Minnesota - Courses - CS 4011- Formal Languages and Automata Theory  
CS 2011 – Discrete Structures**

**Audio Visual Technician – University of Minnesota Law school**

Worked with the setup and control of audio visual equipment

## Publications

October 2003

- 
- **SAFAR – A bandwidth-efficient routing protocol for Mobile Ad hoc Networks**

Selected for presentation at the 2<sup>nd</sup> International conference on Ad hoc Networks and Wireless **AD-HOC NOW '03**, co-sponsored by ACM SIGMOBILE, Montreal, Canada. Proceedings published in Lecture Notes in Computer Science 2865 by Springer-Verlag as conference proceedings.

## Programming

### Experience

- Developed a clinical image viewer, **QREADS**, using J2EE technologies while interning at **Mayo Clinic, Rochester, MN** - Summer 2005.
- Attended a course on “**Object-oriented network programming**” conducted by UACT and held at IIT, Madras in October-November 2002.
- One of three students to represent the college at the annual international **ACM - Inter Collegiate Programming Contest** at IIT, Bombay, December 2003.

---

## Projects

Current

- **Counting groups of people** – Estimate the count and track groups of people based on a novel method and techniques in Computer Vision

Past

- **Techniques in Image Denoising – A comparative study**  
Implemented a method based on Independent Component Analysis and compared it with state-of-the-art image denoising techniques
- **Offline visual mapping and door detection in a hallway using a limited sense robot** – The goal of the project was to map a hallway using vision techniques using a camera mounted on a robot.
- **Application Specific Performance Comparison of MANET routing protocols** - Done using GloMoSim. Was awarded the **Best Project Award** for the year 2003-2004 by the department of Information Technology, Sri Venkateswara College of Engineering
- **SAFARsim** - A multi-threaded real-time Simulator for simulating the operation and evaluation of SAFAR using C++.
- **easyHTTP** – A simple implementation of HTTP in Linux using C++.
- **JPEG Vs JPEG2000** – A comparison of the two compression standards and their performance using MATLAB and Adobe Photoshop.

## Technical Proficiency

Operating Systems

Windows, Linux, Unix, AIX

Computer Languages

C/C++ with STL, Visual C++, JAVA, Visual Basic 6.0, Oracle, SQL, X86, 8085 Assembly

Computer Vision

OpenCV, VXL, IPL

Web skills

J2EE, HTML, DHTML, Javascript, ASP, XML, Php, Photoshop, Flash

Other Tools

IBM Websphere Studio, Websphere Application Server, Mercury LoadRunner, Matlab, Latex, GNUPlot, MS Office.

## References

Available upon request