Karthikesh Raju

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Objective

Obtain a position that provides opportunities to

- Develop, explore and enhance areas related to wireless technologies
- Work with and in the standardization of these technologies
- Collaborate and work on projects in both the areas of expertise, and in other diverse areas
- Enhance critical thinking for development of innovative solutions

Education

Ph.D in Computer Science, thesis under review
Helsinki Univ. of Technology, Lab. of Computer & Information Sc.,

M.Sc., Communication Technology, May 2000
Universität Ulm, Germany, Department of Information Technology

B.E., Electronics & Communication, July 1997
Bharathiar University, India

Experience

Helsinki University of Technology Researcher
Finland 2/2001 – Present
Developed algorithms based on independent component analysis, and combined ICA with traditional methods (like MRC) for improving interference cancelation. Developed switching strategies for ICA based detection techniques - effectively making them "semi-blind". A "Blind" algorithm based on the denoising principle was also developed, analyzed and studied. Further, the issue of extending and improving algorithms with "prior" information was studied.

DaimlerChrysler Research Centre Researcher
Ulm, Germany 6/2000 - 2/2001, 8/1998 - 10/1998
Performed a study and analysis of adhoc protocols for suitability in vehicular environments. Simulated adhoc protocols. Also developed regression algorithms for automated lane detection, and wavelet based image analysis for detection of land mines. Additionally, developed a GUI based toolkit for land mine detection.

DaimlerChrysler Research Centre Junior Scientist
Bangalore, India 7/1997 - 3/1998
Was a member of a team in the analysis of DGPS algorithms for a ground station. Tested the application developed by the then Daimler-Benz Aerospace AG, Germany.

Indian Institute of Technology Summer Research Fellowship
Chennai, India 6/1996 - 8/1996
Studied and analyzed neural networks. Mini tasks included the study of optimization using Hopfield networks. Projects included solution to the traveling salesman problem and some image denoising.

Skills

Programming Languages: Matlab, C++, Python, HTML

Operating Systems: Linux/Unix, Windows, and MacOS X

Language Skills: English, Tamil, Hindi, intermediate German, some familiarity with Finnish

Honors & Awards

- Nokia Scholarship - 2001, 2002
- Emil Aaltosen Scholarship, 2003
- Universität Ulm: Best Comm.Tech Student, 1999
- Bharathiar University: Gold Medal, 1997
- Indian Institute of Technology, Chennai: Summer Research Fellowship, 1996 [1]

Publications

Journal: 2, Conference: 12, Others: 1

[1] Awarded by the Jawaharlal Nehru Centre for Advance Scientific Research, Bangalore, India