Vaibhav Bhandari

PRESENT ADDRESS
401 Spring Street
Santa Cruz, CA 95060
Tel: 1-831-423-7381
Email:vaibhav@cse.ucsc.edu
http://www.cse.ucsc.edu/~vaibhav

PERMANENT ADDRESS
180 Simpi Lane
Lasalgaon Dist. Nasik
Maharastra, India 422306
Tel: +91-2550-266-203

OBJECTIVE

To seek a challenging position in the field of Computer Science and IT Management related to Systems Programming, Systems Design or Algorithms in an organization with strong growth and learning-oriented social culture.

INTEREST

Systems programming, Embedded and Real-time Systems, Verification, Software Components, Code Optimization and Compilers.

EDUCATION

- MS Computer Science, UC Santa Cruz, Santa Cruz, CA 95060. Sep 2001 - June 2003.
- BE Computer Engineering, VES Institute of Technology, Mumbai, India. Aug 1997 - Aug 2001. (Top 5%)
- Diploma in Business Finance (part time), ICFAI, Hyderabad, India. June 2000 -Aug 2002. (Top 10%)

EXPERIENCE

Research Assistant   Design and Verification Lab   Fall 2002 - Present
UC Santa Cruz

Currently working on release of Chai (checker for interface automata), formalizations and tools for interfaces. Instrumented and analysed C-code using CIL for resource interfaces. Wrote a Blif-MV to Reactive Modules translator in Ocaml to use the Mocha environment for utilizing verilog verification work.

Systems Research Programmer   Distributed Sensor Networks.   Summer 2002
USC-ISI East, Virginia.

Worked on Tiny Mica sensor nodes running Tiny-OS. Coded a repeater component on top of the RFM stack and set-up a Mote Sensor Network with suitable data-logging for futhur research.

Teaching Assistant   UC Santa Cruz, CA   Fall 2001-Spring 2002

Teaching Assistant, at UC Santa Cruz for Introductory Java(CMPS12A), Advanced Java (CMPS109) and Data Structures (CMPS101) courses.

Consultant and Developer   Handhelds.org and   Freelance Opensource
Picopeta Simputers, Bangalore, India.

Volunteer for hacking a bootloader for XScale based IPAQs. Writing a device driver for DS1307 (I2C based) RTC chip intergrated on the strong-arm based SimputerV3 board running linux.

Systems' Developer   USGS Santa Cruz, CA   Summer 2002

Extension and porting of ZTool (Real-time bathymetry in Java and Fortran-77) from Irix to Linux (x86). Initial research and Systems' development for Campbell-Scientific data-logger accessibility via Cell-phone/ PSTN.

Research Assistant   Tata Institute Of Fundamental Research   Summer 2001
Mumbai, India

Worked on MicroPayment protocol design for kiosk based consumer points and related security issues.

PROJECTS

- Release lead for a verification environment - Chai (checking automata interfaces).
- Working on Flexi - a research tool for interface automata.
- Implemented a Debian apt-get like utility for Simputer- handheld.
- RTC-DS1307 (I2C based) device driver for SimputerV3 board running linux for strong-arm boards.
- Implementation of MAC layer for the Leg-OS (now BrickOS) kernel.
- Code generation phase of annotated parallel C (K1) for a SIMD parallel processor (Kestrel).
- Implementation of various EDF Schedulers in Linux kernel with exciting real-time related results.
- Vega-Rekha a tool for java bytecode optimization written in java supporting GUI, CommandLine and import executions.
- Yaadein - a website for collaborative authoring of my class' yearbook and MA Awards - a secure online voting system, both based on PhP/MySql.
- Library Management System - a compact implementation of library system using C++ and STL library under GCC environment.
- Collision Avoidance System, system integration cell as a part of IEEE branch project. Based on MC6811 microcontroller.
- Pure Maths Research Workshop, Bhaskaracharya Prathisthan, Pune, India Summer 1995.

SOFTWARE SKILLS

- Programming Languages: Pascal, C(4 years) , C++(2 years), Java(3 years), Esterel (6 Months), OCaml(9 Months - Expert level), C#(3months), Lisp(3 months).
- Scripting Languages: Perl, Shell script, PHP, SQL.
- Mark Ups: HTML, XML(1.5 years), LaTeX.
- Editors: Emacs, MS-Word, MS-Publisher, MCedit, ilyx.
- Compliers and debuggers: GCC, GDB, Turbo C++, JDK 1.2, Forte, MS Visual Studio.
- Platforms: (x86,Arm) Linux, x86 Win, Solaris.

EXTRACURRICULAR

Editorial and Musical

- Chief Editor of *.*, the annual inter-collegiate student magazine of Computer Society Of India's Mumbai chapter.
- Editor and Conceptualizer of e-Sense, CSI-VESIT's newsletter.
- Editor and Conceptualizer of Saransh - brochure of United Jain Students' Home, Mumbai.
- Student of Bamboo Flute in-perspective of fusion and indian classical music. Currently implementing a fuzzy-logic based music analyser and generator for Indian Classical Music (in Midi format).

Leadership

- Organizing Volunteer for TIECON 2003, the annual conference of the biggest entrepreneural society in world - TIE.
- Founder, Vitraag Inc (www.vitraag.com) a consultancy and software development company.
- Evangelist, Pragat Bharat - an initiative to see India as a developed country.
- Member of Core committee of Emerge2000 - technical symposium organized by CSI India.
- Conceptualizer of Inflections'99 a CSI technical event.
- Chief Organizer of a cultural festival Mirage2000.

ACADEMIC AWARDS AND HONORS

- Won the coveted National Talent Search Examination (NTSE) Scholarship awarded by National Council of Education Research and Training, India.
- UC Santa Cruz tution fellowship and UC Regents Grant.
- Kaprepar Mathematics Scholarship.

MISSION STATEMENT

Mode: Happiness Method: Practicality and Goal: Dreams.