Shravan Aras

Personal Data

Place and Date of Birth:	Pune, India	24 December 1990
Address:	1810E Blacklidge Drive, APT 203, Tucson, Arizona - 85719
Phone:	520.248.9802
email:	shravanaras@cs.arizona.edu

Education

Current Phd, Computer Science, **University of Arizona**
Gpa: 3.83/4.0

July 2012 Undergraduate Degree in Computer Engineering,
College of Engineering, Pune, India
Thesis: "Monitoring framework of B-Tree (BTRFS) filesystems" | Advisor: Abhijit Meenakshi

Work Experience

Current
Jan 2014 | Research Assistant
University of Arizona
Graduate research assistant for Dr. Chris Gniady.

Aug-Dec 2013 | Teaching Assistant
University of Arizona
Assisted Dr. McCann with Analysis of Discrete Structures and Dr. Homer with System Programming and UNIX. My responsibilities included grading written homework, programming assignments, quizzes and exams along with conducting weekly sections.

Summer 2013 | Research Assistant
University of Arizona
Graduate research assistant for Dr. Chris Gniady.

Jan-April 2013 | Teaching Assistant
University of Arizona
Assisted Dr. Zhang with Computer Networks in grading homework, programming assignments and exams.

Papers and Presentations

2014 Shravan Aras & Chris Gniady.
Green Touch : Transparent energy management for cellular data radio
Manuscript in preparation

2011-2012 Co-Authored (Pub-International Astronautical Congress):
1. A MODULAR, GENERIC, LOW-COST ON-BOARD COMPUTER SYSTEM FOR NANO/PICO SATELLITE APPLICATIONS
2. A HYBRID APPROACH TO RADIATION FAULT TOLERANCE IN SMALL SATELLITE APPLICATIONS

Technical Skills

Programming Languages:	C, GO, Java, PHP, Python
Scripting Languages:	Bash, Javascript, HTML, CSS
Database:	MySql, SQLLite
OS:	GNU/Linux(Debian, Ubuntu, Mint, Fedora)

Academic interests

Green Computing, Operating Systems, Embedded Systems, System Programming, Computer Networking.

Project Experience

2012-2013
ACADEMIC PROJECTS

Log structured file system
Implemented LFS as part of Adv. Operating Systems course, using FUSE as the user level library

Software router
Implemented simple software router on a virtual network to handle packet forwarding and ICMP error messages

Compiler for subset of Oberon language
Implemented lexical, syntactic, semantic and optimization (instruction selection) phase for an Oberon(subset of the whole language) language for MIPS32 target

2009-2012

SWAYAM communication satellite
communication pico satellite
Worked on bare metal ARMv7 using GNU tool chain, JTAG and openocd
Programed drivers - SPI, SD1.0, I2C, PWM, PIO
Application code - Antenna deployment, maximum power point tracking, beacon transition
Single stack RTOS (custom implementation) - programmed section extractors(.text, .data) for ARM elf
Responsibilities - OnBoard computers lead (team strength:6), Project Manager(team strength:40)
http://www.coep.org.in/csat/

Contributions to BTRFS
Implementations of Sysfs for BTRFS
Monitoring Framework for B-Tree File System

MISCELLANEOUS

Debian contributions
Current Debian packages maintained -
http://qa.debian.org/developer.php?login=123.shravan@gmail.com

List of open source projects contributed to / authored
https://gitorious.org/~shravan