Aashutosh Taikar

aashutoshtaikar.github.io

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Education

OREGON STATE UNIVERSITY MEng in Electrical and Computer Engineering

Systems & Networking | Software Development Dec 2018 | Corvallis, OR

GPA: 3.23/4.0

MUMBAI UNIVERSITY

BE in Electronics and Telecommunication

May 2015 | Mumbai, India

Links

Github:// aashutoshtaikar LinkedIn:// aashutoshtaikar

Coursework

Human-Computer Interaction
Advanced Computer Networking
Intro to Parallel Programming
High Performance Computer Architecture
Computer Architecture
CMOS Integrated Circuits-1
Analog CMOS Integrated Circuits
Interconnection Networks
Distributed Systems

Skills

Programming languages

- C/C++(98/11/14/17), template metaprogramming C#/VB.Net
- •SQL(mysql, MsSql) •Bash

C++ Libs: STL, rapidjson frameworks: Qt APIs: OpenMP, OpenCL

IDEs:

- Qt Creator Eclipse Visual Studio
- PyCharm

Familiar

• Python • GoLang • Javascript • Hadoop

Familiar Protocols: GPIB, I2C, SPI, UART, CAN, PCIe

Research(survey)

• Overview of SSDs and parallelism in SSD controller

Experience

On Semiconductor | Technology Reliability Applications Intern

Jun 2018 – Sep 2018 | Pocatello, Idaho

Project: In-Situ Parametric Test System for process Reliability

- Designed schematic for the Control board containing extensive relays, shift registers to test DUTs(Device Under Test) controlled via DAQ
- Developed an application in VB.Net and National Instruments GPIB/VISA,DAQ libraries which controls 12 Power Supplies(Keithley 2400 Source Meter Unit) and an oven for stress test via GPIB interface, control board and functions as per the user input and selected DUTs
- Performed Wafer / Device level testing using Keithley Parametric Test System,
 Oscilloscope and DMM

Oregon State University | Graduate Teaching Assistant

Mar 2018 – June 2018 | Corvallis, Oregon | C++, OpenMP, OpenCL, SIMD CS-475/575 Intro to Parallel Programming - Code debugging and Solved doubts during office hours

Continuum Managed Solutions | Network Support Engineer

Oct 2015 - June 2016 | Mumbai, India

Maintaining windows server network, checking server event logs, Created scripts for troubleshooting server windows network services

Projects

Fractal Image Creator | C++

F18 | Advanced C++

Creates a fractal bitmap image using the mandelbrot set algorithm, the same is implemented using OpenMp for efficiency.

Autocorrelation using OpenMP, SIMD and OpenCL | C++

Spring17 | Parallel Programming

Reads a random signal file, runs the Autocorrelation function on multiple threads using OpenMP. The same is implemented using the SIMD and OpenCL.

Link Management Protocol - Control Channel - Finite State Machine | C

Winter17 | Advanced Computer Networking

Implemented a part of the LMP protocol, which is the Control Channel Finite State Machine (FSM) described in RFC4204 using socket programming by studying 5 states and 17 events of the FSM.

Raft-Leader election implementation | GoLang

| Winter17 | Distributed Systems

Leader election using the logic described in the Raft (A consensus algorithm) paper. Three states described in the Raft were setup in this algorithm, which changed as per various timeouts and consensus.

$\textbf{FARMBOT-Agricultural Automation robot } \mid \textbf{Diptrace} \mid \textbf{Proteus} \mid \textbf{C}$

| March15 | B.E. Final Year Project

Created Schematics and Code for 8-bit micro-controller for actuation of a prototype bot which can perform basic farming functions for acquiring data from IR sensor using ADC and controlling motor driver ICs by PWM.