Prithvi Raj Venkat Raj

Curriculum vitae

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CONTACT

Department of Computer Science and Engineering

Information

University of Florida
451 Harris Lab

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EDUCATION

University of Florida, Gainesville, FL USA

May 2012

GPA: 3.62 (4.0 scale)

M.S., Computer Engineering

• Thesis Topic: News Gathering and Reporting using mobile devices

- Adviser: Professor Abdelsalam Helal
- Area of Study: Mobile computing and Social Networking

Crescent Engineering College, Vandaloor, Chennai, India December 2010

B.Engg., Computer Science and Engineering

First Class

- Project Topic: Reverse Image Search on iPhone
- Adviser: Professor Angelina Gita

Professional Experience

Department of Education, University of Florida, Gainesville, FL USA

iPad Software Developer for K-CRATI

May 2011 - Present

• Adapting experiments designed to measure cognitive skills of kindergarten students

Grooveshark, Gainesville, FL USA

Software Development Intern - Data

May 2011 - August 2011

- Analysed metrics to characterize Apache Hadoop jobs
- Extended Sqoop mySql export functionality to include Apache Hive partitions

Microsoft, Chennai, India

Microsoft Student Partner

June 2008 - May 2010

- Primary liaison between Microsoft and Crescent Engineering College, Chennai
- Administered MSDNAA and Live@Edu

PROJECT WORK

University of Florida, Gainesville, FL USA

Large Scale Data Analysis

- SAMwise: Providing City Trotting Recommendations
 - Compared different topic modeling toolkits, and feedback mechanisms. Implemented a web UI

Mobile Networking

- PRIDE: PRivacy preserving Intelligent riDEsharing
 - Analyzed wifi traces, and computed route similarity to find significant fuel savings while providing k-Anonymity for users

Mobile Computing and Pervasive computing

- DroiDrive: Saving fuel with Android and Facebook
 - Characterized driving style by evaluating sensor output, designed metrics and incorporated game mechanics for motivation

- Optimization of Atlas Sensor Platform
 - Reduced Energy consumption by ~20 percent
 - Implemented sensor reading caching, dynamic push-pull conversion, lazy sensor initialization
 - Used ontology to eliminate certain actuator movement requests

Computer Networks

• Implemented a command line peer to peer file transfer program based on the bit torrent protocol

Distributed Operating systems

• Implemented applications that distribute computation to clients, CREW problem, Suzuki- Kasami broadcast algorithm using sockets and multi-threading

Crescent College, Vandaloor, Chennai India

Senior Project

- Reverse Image Search on iPhone
 - Developed a geolocation aware image crawler and search engine
 - Collaboratively used users' skill to recommend similar results

HARDWARE AND SOFTWARE SKILLS

Embedded and Real-time Systems:

• Software and hardware development with Atmel MCUs and Arduino

Computer Programming:

• C, C++, Objective C, UNIX shell scripting, MySQL, and others

Version Control and Software Configuration Management:

• DVCS (Git), and others

Information/Internet Technology:

• Networking, Services (Apache, SQL, MediaWiki, POP, IMAP, SMTP)

Mobile and Social Platforms:

• iPhone, Android, Facebook API, Twitter API, Neo4j

Data Platforms:

• Apache Hadoop, hive

Productivity Applications:

• TeX (LATeX, BibTeX, PSTricks), Vim, most common productivity packages (for Windows, OS X, and Linux platforms)

Operating Systems:

• Microsoft Windows family, Apple OS X, Linux and other UNIX variants

REFERENCES AVAILABLE TO CONTACT Available upon request.