Prithvi Raj Venkat Raj — Curriculum vitae

Contact Information

Department of Computer Science and Engineering
University of Florida
451 Harris Lab
Gainesville, FL 32611 USA

Mobile: +1-352-575-0144
E-mail: prv@cise.ufl.edu
WWW: vprithvi.com

Education

University of Florida, Gainesville, FL USA — **May 2012**

M.S., Computer Engineering — GPA: 3.62 (4.0 scale)

- 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.